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## REPORT



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## CHAPTER XXII.

## CONTRIBUTIONS TO THE HISTORY OF THE HOPKINS GRAMMAR SCHOOL, NEW HAVEN, CONN., 1660 TO 1900.

Compiled by H. K. Willard, Class of ' $75 .{ }^{1}$

The Hopkins Grammar School, founded by Edward Hopkins, governor of the colony of Connecticut in 1660, "for the encouragement and breeding up of hopeful youth in a way of learning both at the grammar school and college for the public service of the country in future times," is a classical institution, designed for the preparation of youth for college, particularly for the academical department and the Sheffield Scientific School of Yale University, for which it has fitted more boys than any other preparatory school. This preparatory course, however, furnishes also excellent training for business, and in nearly every class which graduates there are some who enter immediately into business as their life work. Candidates for admission are required to be well grounded in the common English branches and to furnish satisfactory testimonials of good character. English studies are blended with the study of the Latin and Greek languages.

ORIGIN OF THE SCHOOL.
[Extract from the last will and testament of Edward Hopkins, esq., sometime governor of Conneeticut Colony, but dying in England, which will was proved in the prerogative court in London the 30th of April, 1657.]

The sovereign Lord of all creatures giving in evident and strong intimations of his pleasure to call me out of this transitory life unto himself, it is the desire of me, Edward Hopkins, esq., * * * to thus dispose of the estate the Lord in mercy hath given to me. * * * And the residue of my estate in New England I do hereby give and bequeath to my father, Theophilus Eaton, esq., Mr. John Davenport, Mr. John Gulick, and Mr. William Goodwin, in full assurance of their trust and faithfulness in disposing of it according to the true intent and purpose of me the said Edward Hopkins, which is to give some encouragement in their foreign plantations for the breeding up of hopeful youths in a way of learning, both at the grammar school and college, for the public service of the country in future times." * * *
"Signed, sealed, declared, and published by Edward Hopkins, esq., at his home in London on the 7th day of March, in the year of our Lord 1657, to be his last will. and testament.
[Extracts from An Historical Discourse on the Two hundredth Anniversary of the Founding of the Hopkins Grammar School, New Haven, Conn.]
"Quod felix faustumque sit."
So spake Jobn Davenport two hundred years ago to the general court of the colony of New Haven, and inaugurated the Hopkins Grammar School with words of happy omen. "Happy be it and prosperous." * * *

[^0]The occasion which we are gathered to commemorate as the birthday of this collegiate school is entitled by the venerable historian of Connecticut, "The Rev. Mr. John Davenport's resignation of Governor Hopkins's donation to the general court of New Haven, June 4, 1660." * * *

The record of the transaction as it stands in the ancient record book of the colony, from which it has been repeatedly transcribed by historians, is a copy of Mr. Davenport's own writing. It opens with the Latin formula of benediction which has ahready been repeated, "Quod felix faustumque sit," and proceeds:
"On the 4 th day of the th month, 1660, John Davenport, pastor of the Church of Christ in New Haven, presented to the honorable General Court at New Haven as followeth:"

The paper goes on to remind the court what they themselves had resolved sundry years before (as appeared in the public records), toward the founding of a college in New Haren - "a small college, such as the day of small things will permit," and informs them at once on the decision of the court to undertake that enterprise, he, "the said John Davenport wrote unto our beloved friend, Edward Hopkins, esq., then living in London, the result of these consultations. In answer whereunto the said Edward Hopkins wrote unto the said John Davenport, a letter dated the 30th of the fourth month, called April, 1656, beginning with these words: 'Most Deare $\mathrm{S}_{\mathrm{i}}^{\mathrm{r}}$,-The long continued respects I have received from you, but especially the speakeings of the Lord to my heart by you, have put mee ruder deepe obligations to love and a returne of thankes beyond what I euer have or can expresse, \&c.,' then after other passages ( $w^{\text {eh }}$ being secretts hinder mee from shewing his letter), he added a declaration of his purpose in reference to $y^{e}$ colledge about $w^{\text {ch }}$ I wrote unto him. 'That $w^{\text {ch }}$ the Lord hath given mee in those parts, I ever designed the greatest part of it for the furtherance of the worke of Christ in those ends of the earth, and if I viderstand that a colledge is begun and like to be carried on at New haven for the good of posterity, I shall give some encouragement thereunto.' These are the very words of his letter. But before Mr. Hopkins could return an answer to my next letter, it pleased God to finish his days in this world."

The communication then announces to the general court that Governor Hopkins, by his last will, had bequeathed his estate in New England to trustees, of whom Daremport was one, to be disposed of "unto the public uses mentioned," and that it had been agreed by the trustees that one-half of the estate which should be gathered in should be paid unto Mr. Davenport for New Haven.

Mr. Davenport adds that the other trustees had assented to his declared purpose of interesting the honored magistrates and elders of the colony in the disposal of that part of the estate which was to be here expended "for the proving of the college work in a gradual way," * * * and he delivers over his trust to the legislature of the colony, "adding also his desire of some particulars for the well performing of the trust." ${ }^{*} * *$

By one of these "desired particulars," which were not conditions nor stipulations, but which seem to have been undertaken by the public with not less of fidelity, for being a request from their chief pastor, there was granted for the use of the proposed college a "home-lot" fronting on the public square; and the annual rent of an estate early consecrated to this use was pledged to the new enterprise under the name and title of "college land." The main fund of the infant seminary from the estate of Governor Hopkins did not become at once available. Hindrances, legal and political, were laid in the way of the enterprise. The form of its management was modified from the original design, its grade was reduced below the plans and hopes of its projector, and its active operation was for some years delayed. Nevertheless, by the wise forethought of Davenport, seconded by the unhesitating generosity of the townspeople of New Haven, it was at once provided with a home anong their "fair and stately hou-es," so that in the year 1660, "the th day of the fourth month," this "collegiate school" became an institution. * * *

I find no difficulty in establishing a relationship between our Hopkins Grammar School and the ancient and honorable family of the grammar schools of England, which grew up in the middle ages, and which, quickened by the restoration of learning, grew with its growth, and strengthened with its strength, under the brightening light of the Reformation. In particular we can trace its descent lineally back to the ancient city of Coventry, whence came forth Davenport and Eaton to be founders of New Haven. That fine old city boasts among its institutions a free grammar school, founded in the reign of Henry VIII, and strengthened from time to time by gifts and legacies from public-spirited citizens. The family names of Davenport and Hopkins stand conspicuous in the roll of its benefactors.

In Coventry Free Grammar School, somewhere about the year 1607, Theophilus Eaton and John Davenport were schoolnates, and that friendship between them,
which in an important sense was the germ of the New Haven Colony, was contracted between schoolmates in the famous Grammar School of Coventry. They were fellow passengers together on the good ship Hector to New England, and with them also sailed as fellow passenger the Edward Hopkins, of whose name and bounty the Hopkins Grammar School is a perennial monument. Of his life previous to his embarkation not rery much is known. He had been a scholar in the Royal Free Grammar School in his native town of Shrewsbury, and became a successful London merchant. Family ties connected him with Theophilus Eaton, as his wife was a daughter of Mrs. Eaton by her first marriage.
A grammar school was established in New Haven soon aiter the settlement of the town in 1638. Of this school the first master or rector was Ezekiel Cheever. He left New Haven for Massachusetts in 1550, and for many years was at the head of the grammar school in Boston, where he died in 1708, in the ninety-fourth year of his age.

He instructed in the Latin and Greek languages seventy years and has been called the "father of New England schoolmasters." Of the state of the school after this, till it passed into the Hopkins Grammar School, there is no record.

The home of Hopkins has never been in the jurisdiction of New Haven, but of Connecticut. During most of his residence in New England he was governor of the colony of Connecticut every alternate year; he was commissioner of the colony in the Congress of "the little powers;" as a merchant he pushed his trading stations up the river and into the wilderness, and founded the commerce in American cotton. Within fifteen years after the first arrival of Hopkins at Boston, he went back to Old England, full of colonial honors, and was received to a position of the highest trust and dignity in the government of the Lord Protector. In the midst of his new honors he never forgot his friends behind him in the wilderness. His death came in 1657. He had no children, and New England was his chief heir. But he did not forget to make provision for his "dear, distressed wife," for whom he left, in care of her brother, one hundred and fifty pounds per annum for her comfortable maintenance, "heartily entreating him to be careful and tender of her." At her death, the sum of five hundred pounds from his estate in Old England was to revert to the prospective college, which was already heir to the whole of his estate in. New England, and which seemed to him to be in a fair and hopeful way of being established. It is an unfortunate circumstance that this reversion on the death of Mrs. Hopkins was diverted from the intent of the trustees and from that of the testator into other channels. * * *

His bequest for the establishment of a grammar school was not immediately available.

By vexatious delays the settlement of the estate was brought into the depressed and disturbed period of the last two or three years of the Republic of New Haven, when the Colony Grammar School (which had been cherished as conditional and ancillary to the Hopkins College) was reluctantly given up, and this institution was compelled to descend to a lower grade than that which the hopes of its founders had intended for it, and to be known in history as the Hopkins Grammar School. * * *

It was a sore disappointment to the soul of John Davenport when this dear proj-ect-which was to make the town of New Haven an university city-was so apparently defeated. But it is a beautiful compensation for the partial failure of the grand designs of Davenport and Eaton and Hopkins that Elihu Yale, the nephew of the "dear distressed" wife of the latter, the grandson of Mrs. Eaton, should go from his "native" New Haven, and gathering up the wealth of India should furnish from it an endowment and a name for the great university located in the city which John Davenport helped to found. * * **
The princinal record which remains of the history of the school to the present time is the record of the succession of its rectors. For this period of nearly two centuries, which include times of war, of revolution, and of general decline in all public interests, it is an interesting fact that this seminary has never lacked a liberally educated man-a college graduate-as its teacher. On the roll of its teachers are names illustrious in the history of American education and literature.

CATALOGUE OF THE MASTERS OR RECTORS OF THE HOPKINS GRAMMAR SCHOOL FROM 1660 TO 1875 , INCLUSIVE. ${ }^{1}$

No. 1. (1660.) Jeremilah Peck.
No. 2. (1663-6t.) No inceme of the fund designated in 1660 appears to have been used for the grammar school until 1664. George Pardee was master under the arrangement made in 1664 between Mr. Davenport and the town.

At the laying down of the colony school in 1662 , it was proposed to have a schoolmaster at the town's charge. But the generous offer of a salary of 60 pounds, backed by Mr. Davenport's personal efforts, failed to secure even a competent English master. "The fittest that could be found for the work" was George Pardee, who was found "willing to do what he was able," but who told the town, with great frankness, that "he had lost much of what learning lie formerly had obtained." He undertook "to teach english and to carry them on in lattine so far as he could; also to learn them to write. Some thing was spoken about teaching arethmeticke as very necessary in these parts. * * * He was also advised to instruct the youths in point of manners, there being a great fault in that respect, as some exprest."

It appears that the incumbency of George Pardee was something more than a momentary makeshift for this single emergency, and that, notwithstanding the zealous efforts of Mrr. Davenport, and of the trustees of the Hopkins fund, to secure a grammar-school teacher-efforts which do not seem to have been hindered by any scruples for the sensibilities of Master Pardee-he continued through a period of at least thirteen years to be the main reliance of the town for the instruction of their youth. The report of the results of his labors is certainly expressed in a style of faint praise: "Several persons say they find some fruit of his labors in their children, and did desire he might go on yet longer."

The continuance of Master Pardee's labors had the effect, as the records show, to bring the town into collision successively with the trustees of the Hopkins estate and with the law of Connecticut, which required in every county a grammar school, the master whereof should be able to instruct youth so far as they may be fitted for college.
No. 3. (1665.) Isfael Chauncy. Mr. Davenport had recommended the town to send to the president of the college for "an able man," to which the president seems to have responded by sending one of his own sons, but which of three who graduated in 1661 is not known-probably Israel, minister of Stratford. That he actually entered on the school, and continued in it until Mr. Street, is known only by inference.
No. 4. (1667.) Samuel Street, Harvard College, 1664. He was the son of Rev. Nicholas Street, teacher of the church in New Haven. Left the school about 1673, and was afterwards minister of Wallingford.
No. 5. (167t.) George Pardee was reengaged (the town being left destitute) "to teach youth to read English, and the Accidence, and any Grammar rules as far as he could, and to write." In 1677, on occasion of an order from the general court concerning the lack of a grammar school at New Haven, Mr. Jones stated that, after the gift of the Hopkins legacy to the town (1664), "a Latin school was set up and continued until Mr. Street removed," but that "for about three years there had been only an English school." After a long debate about the condition of the estate the record concludes:
"The town now being informed in the state of things about the school, they fell to a loving debate to promote the business that a school according to the law

[^1]might be set up, and therefore it is desired that parents of such as have children would be careful to send their children to the school, and to continue them at it, that they may attain to some proficiency whereby they may come to be fit for the service to God in church or commonwealth, and (were) pressed with the custom of our predecessors and the common practice of the English nation to bring up their children in learning."
No. 6. (1683.) Theophilus Muxson. Prior to the year 1683, the doings of the school trustees, when recorded at all, were entered on the town records. In that year a record book was commenced for the school and the following papers engrossed in it, in the clerkly hand of Deputy Governor Jones: (1) Governor Hopkins's will; (2) the Rev. Mr. Davenport's grant, 1668; (3) power of attorney from Davenport, Cullick, and Goodwin, surviving trustees, to Thomas Bull, Nathaniel Ward, and Edward Stebbing, to collect debts, etc., for the estate, 1658; (4) the agreement between Davenport and Goodwin, 1664; $(5,6)$ deeds of real estate; (7) statement of the receipt of the estate, amounting to $£ 412$.

The first record of the doings of the committee begins:
"At a meeting of the above-named committee, the 4th of January, 1683 (i. e., 1684):
"Agreed that Ensign Munson go on with the grammar school at New Haven to make up his year current, and his allowance to be $£ 40$ per annum, as formerly. Also that trial be made of the sufficiency of the said Ensign Munson, and if he be found sufficient to instruct or to fit hopeful youth for the college, according to the trust committed to us, that he have $£ 50$ for the ensuing year."
The "trial of his suficiency" seems to have been unsatisfactory, for three months later he "laid down his charge," and his successor was appointed.

The records continue to be in the handwriting of Governor Jones until the close of the year 1694, after which the records passed into less careful hands.
No. 7. (1684.) John Herriman, son of John Herriman who "kept the ordinary" at New Haren, at that time an office of trust and dignity under the town. He graduated at Harvard College in 1667, and ministered to the church in New Haven more or less from 1676 to 1682 . He was afterwards first minister of Elizabethtown, N. J.

In 1687, during Mr. Herriman's administration, a debt of $£ 88$ s., owing to the Hopkins estate from Mrs. Abigail Davenport, was released to her for the maintenance of her son, John Davenport, at the college. This John, grandson of the New Haven pastor, graduated at Harvard that year, and became the next teacher of the grammar school. At the same time "forty pounds of the list of debts were appropriated for the maintenance, education, and encouragement in learning of John Jones, Samuel Mansfield, Stephen Meeks (Mix), and Thomas Buckingham, * * * of which sum ye aforesaid John Jones is to have a double part, he being a kinsman and relation by affinity to the said donor." John Jones was son to Governor William Jones, who married the daughter of Governor Eaton, half-sister to Mrs. Hopkins. Of these five beneficiaries, three-Davenport, Mansfield, and Mix-graduated at Harvard College. The two former became teachers in the Hopkins school. Davenport at Stamford, Mix at Wethersfield, and Buckingham at Saybrook, were all eminent pastors. The last named was one of the founders of Yale College, and moderator of the Saybrook council.

The curious rules which were adopted by the trustees and published in the school under Mr. Herriman have been printed in full in the annual catalogue for the school for 1857. They may have come substantially from the hand of Mr. Davenport, who alludes to rules which he had drawn. The substance of them is briefly as follows:

1. The school free to all boys from New Haven County; all others to pay 10 shillings entrance fee.
2. Qualifications for admission: That boys should have learned to "spell their letters well" and begin to read, and "all girls be excluded as improper and inconsistent with such a grammar school as the law enjoins."
3. School hours: From 6 to 11 a . m., from 1 to 4 p . m., in winter; in summer, till 5 p. m.
4. A monitor to be appointed to mark absences, and the faulty and truants to be corrected or reproved.
5. Prayer to be offered every morning.
6. Scholars to be seated in orter of scholarship, and not to leave their seats.
7. Good behavior required. The incorrigible to be expelled.
8. Nisbeharior at church to be corrected.
9. No Latin boys allowed to alsent themselves.
10. Boys to be examined Monday morning on the sermons, and Saturday afternoon to be catechised.
No. 8. (1687.) John Dafexport, grandson of the first pastor of New Haven, graduated at Harvard in 1687. Undertook the school in August of the same year, and continued it for some four years or more. He afterwards became minister of Stamford.
No. 9. (1691.) Simuel Mansfield was Schoole Master in this year, and continued in the position until 1699. He graduated at Harvard in 1690, having been, like his predecessor, assisted in his education from the Hopkins fund. After leaving the school he went into the West India trade. Died, 1701.
No. 10. (1699.) Josepir Moss. "Sir Moss . Begun . to keep scole . the 27: of . November 1699: then . sayed Moss . put . in by the Conmittee." (School Records.) Three years before this his father was "allowed the use of Colledge meadow rent-free, for his encouragement in giving his Son Colledge Learning." He graduated at Harvard, 1699. After he left the School, November, 1708, he became minister of Derby. "No clergyman in his time had a higher reputation in Comecticut, than Mr. Moss." (Prof. Kingsley.)
No. 11. (1706.) John James. Received an honorary degree at H. C., 1710. He kept the school only six weeks.
No. 12. (1707.) Shauel Coore, Y. C., 1705. Continued to teach the school for eight years, and went from it to become minister of Stratfield (Bridgeport). He was, in 1732 , fellow of the college. Died in 1747.
No. 13. (1716.) Diniel Browne, Y. C., 1714. Tutor in Y. C. Went to England to receive orders as an Episcopal minister, where he died of smallpox, 1723.
No. 14. (1718.) James Pierpoint, Y. C., 1718. Son of the pastor of New Haven. Tutor in Yale College, 1722-1724. Died, 1776.
No. 15. (1721.) Richard Treat, Y. C., 1719. "Mr. Treet Took the Care of the Grammar School in Newhauen 31th day of May anno Domini 1721." Was minister of Abington, Mass., and not D. D. This title belonged to another of the same name who graduated six years later.
No. 16. (1721.) (Sept. 18.) Samier، Mix, Y. C., 1720. Son of Samuel Mix, of New Haven.
No. 17. (1729.) Daniel Murson. "Agreed with Ensigne theoplielus Miunson for his son Daniel Munson to keep the gramer scholl for one year to begin $22 d$ November and to keep about seven hours in the day in the winter season and about eight hours in the summer season in each day and not to exceed twelve play dayes in the year and for his Reward he is to have the money raysed on the scoollers heads and the Rents of the money and of the land and Meadow of this present year." Y. C., 1726.
No. 18. (1730.) Moses Mansfield, Y. C., 1730. Of a New Haven family in which prevailed a talent for school keeping. (Vide infra.)
No. 19. (1734.) William Wolcott, Y. C., 1734. Tutor, 1735. Died, 1799.

No. 20. (1735.) Isalac Dickerman, Y. C., 1736. Taught the school for six weeks, October and November of 173 J .
(For the next four years there is no record of the names of schoolmasters, except, written on an odd leaf, an account of a payment for ten months' services to) :
No. 21. (1739.) ——Mills, Gideon, Y. C., 1737, or Ebenezer, Y. C., 1738.
No. 22. (1749.) Moses Mansfield. The same who kept the school in 1730.
No. 23. (1741.) Joqn Whiring, Y. C., 1740. Tutor, 1743-1747. Was afterwards judge of probate in New Haven and deacon of the First Church. Died, 1786.
No. 24. (1742.) Rechard Mansfield, Y. C., 1741. Son of Jonathan Mansfield, the secretary and treasurer of the trustees. Was ordained in England, 1749, as an Episcopal minister and took charge of congregations in West Haven, Derby, and Waterbury.
No. 25. (1747.) Moses Tutule, Y. C., 1745. Marked as a minister in the Triennial Catalogue of Yale College.
No. 26. (1747.) Benjamn Talmage, Y. C., 1747. Minister of Brookhaven, L. I., where he died, 1786. He was father of Col. Benjamin Tallmadge, of the army of the Revolution.
No. 27. (1747.) Elphalet Ball, Y. C., 1748. Born at New Haven. Became minister of Woodbridge and afterwards of Ballston, N. Y., which was named for him. Died, 1797. He taught the school only a single week.
No. 28. (1747.) Tinothy Pitkin, Y. C., 1747. Tutor. Afterwards minister of Farmington and fellow of the college. Died, 1811.
No. 29. (1749.) Jonn Hotchkiss, Y. C., 1748; received degrees also from Harvard, New Jersey, and Dartmouth Colleges. He was a New Haven merchant and was killed in the British invasion of New Haven, July, 1779.
No. 30. (1751.) Thomas Whlinis, Y. C., 1748. Was a preacher of the gospel, but never ordained. Died, 1778.
No. 31. (1753.) Jonathan Wells, Y. C., 1751. Tutor, 1754. Died, 1792.
No. 32. (1754.) John Noyes, Y. C., 1753. Son of the pastor of the First Church, New Haven. Died, 1767.
No. 33. (1757.) Tmothy Jones, Y. C., 1757. Was justice of the peace in New Haven, where he died, 1800.
No. 34. (1759.) Noah Williston, Y. C., 1757. Minister of West Haven, where he died in 1811.
No. 35. (1760.) Ebenezer Grosyenor, Y. C., 1759. Minister at Scituate, Mass. Died, 1788.
No. 36. (1761.) Matthew Merriam, Y. C., 1759. Minister at Berwick, Me. Died, 1797.

No. 37. (1761.) Ayery Hall, Y. C., 1759. Son of Rev. Theophilus Hall, of Meriden. Minister at Rochester, N. H. Died, 1820.
No. 38. (1762.) Hadloci Marcy, Y. C., 1761.
No. 39. (1764.) Punderson Austin, Y. C., 1762. Tutor, 1765. Died, 1773.
No. 40. (1765.) William Jones, Y. C., 1762. Merchant in New Haven. Died, 1783.

No. 41. (1768.) Bucinghinm St. John (from Norwalk), Y. C., 1768. Tator, 1770. Died by drowning while tutor, 1771. An elegy was written on the occasion of his death by Judge Trumbull, author of McFingal.
(Professor Kingsley inserts here, in the list of teachers of the school prepared by him and published in the catalogue of the school for 1850-51, the name of President Timothy Dwight. The biography of Dr. Dwight, by his son, prefixed to his Theology, also represents that immediately after his graduation, in 1769, he taught a grammar school in New Haven. No other grammar school than the Hopkins School is known to have existed at the time in New Haven, and it is
highly improbable that more than one could have been sustained there. As it would seem very improbable that the biographer of Dr. Dwight, being his own son, and having access to his papers, should be mistaken as to how Dr. Dwight was engaged for so long a period of his active life, we might have been held justified, on this authority, in retaining this famous name upon our list.

On the other hand, however, not only do the records of the school give no proof that Dr. Dwight ever taught it, but they do give distinct proof of the contrary. There is no break in the record, and no interruption in the succession of teachers, in which to find a place for him.)
No. 42. (1770.) Samuel Darling, Y. C., 1769. Became a physician at New Haven, and deacon of the First Church. Died at New Haven, aged 91, in 1842.
No. 43. (1771.) Achlles Mansfield, Y. C., 1770. In 1779 became minister of the church in Killingworth in which office he died in 1814.
No. 44. (1774.) William Lockwood, Y. C., 1774. Tutor, 1779. Minister at Glastenbury. Died, 1828.
No. 45. (1777.) Chauncey Goodrich, Y. C., 1776. Tutor, 1779-1781. Afterwards United States Senator and lieutenant-governor of Connecticut. Died, 1815.
No. 46. (1778.) Samuel Bird, Y. C., 1776. Became a planter in Georgia. Died, 1822.

No. 47. (1780.) Zebulon Ely, Y. C., 1779. Tutor, 1781. From 1782 till his death, in 1824, minister at Lebanon, Conn.
No. 48. (1782.) Thomas Lord, Y. C., 1780.
No. 49. (1782.) Richard Woodhull, Y. C., 1752. Tutor, 1756-1761; also, 1763-1765.
No. 50. (1785.) Walter King, Y. C., 1782. 1787, minister at Norwich, Conn. 1813, at Williamstown, Mass. Died, 1815.
No. 51. (1785.) David Daggett, Y. C., 1783. LL. D., judge of the superior court of Connecticut, United States Senator, professor of law in Yale College. Died, 1851.

No. 52. (1786.) Jared Mansfield, Y. C., 1777. He was born in 1759, of the New Haven family of Mansfields, largely represented in this list. After leaving the Hopkins Grammar School, in 1795, he became instructor in that sustained by the Friends, in Philadelphia. His "Essays, mathematical and physical," published about 1800 , was the first volume of original mathematical research issued in this country. After this he was successively Surveyor-General of the United States for the Northwestern Territories, and professor in the Military Academy at West Point. Died at New Haven, 1831. A portrait of him, by Weir, belongs to Yale College. His mathematical reputation, as it has descended to two generations of sons-in-law, is well sustained by Prof. Charles Davies and William K. Peck, of Columbia College, New York. Mr. Mansfield continued master of the school until April 22, 1790, when he sent in his resignation in the words following:
"Gentlemen: Your candor and generosity in appointing me to the charge of the Grammar-School, without any solicitation on my part, demands my warmest acknowledgements, and will ever be remembered with gratitude. I have endeavored to execute my otfice with diligence and fidelity, and should still be happy to serve the Committee, were it not for brighter prospects from abroad, and such as my friends think advisable to embrace. I shall leave my friends in these parts with regret, but shall ever pray for their happiness. These considerations induce me to resign the charge of the Grammar-school, which resignation I beg the committee to accept at the expiration of the present Quarter, viz, on the 28th inst.
"Yours, \&e., "Jared Mansfield."

The committee accepted Mr. Mansfield's resignation "with a grateful sense of his good services."

No. 53. (1790.) Abraham Bishop, Y. C., 1778. For many years collector of the port of New Haven. He was appointed to take the school at the close of Mr. Mansfield's term, and had permission to keep the school in his own house. He retained it for five months, when he "agreed with the committee to resign," and they reappointed-
No. 54. (1790.) Jared Mansfield, who remained now for five years, and probably raised the school to a higher reputation than it had aiterwards until the accession of Mr. Olmstead. He taught in his own house in State street, near Chapel.
No. 55. (1795.) Stephen Twining, Y. C., 1795. Steward of Yale College, 1819-1832. Died, 1832.
No. 56. (1796.) Joun Hart Lynde, Y. C., 1796. Lawyer at New Haven and clerk of the courts. Died, 1817.
The Committee " made choice of Sir Hart Lynde to keep the Grammar-school for the stipend of $£ 60$ per crmum; and said Lynde is permitted a poll-tax of half-a-dollar per quarter for each grammar scholar. And the Committee agree that said master have one week vacation at commencement, also one week on the annual election in May. Said master is not to indulge the scholars with liberty of playing on Wednesdays in the afternoon."
No. 57. (1797.) James Murdock, Y. C., 1797. D. D. and professor of ecclesiastical history in Andover Theological Seminary. Translator of Mosheim's Ecclesiastical History and of the Syriac New Testament into English. Died, 1856.
No. 58. (1799.) Elı Ives, Y. C., 1799. M. D. and professor in the medical department of Yale College.
No. 59. (1801.) Shubael Bartlett, Y. C., 1800. Minister of the church in East Windsor from 1804 until his death in 1854.
No. 60. (1802.) Jonathan Huntington Liman, Y. C., 1802. Lawyer in Northampton, Mass. Died, 1825.
No. 61. (1805.) Nathaniel Freeman, Y. C., 1805. Pastor at Greenfield Hill, Conn. Died, 1854.
No. 62. (1807.) Henry Sherman, Y. C., 1803. Pastor at Weston, Conn. Died, 1817.

No. 63. (1808.) Elizur Goodrıch, Williams College, 1806. Lawyer in Hartford.
No. 64. (1810.) Ebenezer Kelloge, Y. C., 1810. Professor at Williams College. Died, 1846.
No. 65. (1810.) Chauncey Allen Goodrich, Y. C., 1810. D. D., professor in Yale College, editor of a Greek grammar; in 1832 of Greek Lessons; in 1852 of Select British Eloquence. In 1829 established the Quarterly Christian Spectator, and was its sole editor till about 1836. Also, an important contributor to other religious periodicals. Editor of Webster's Dictionary. Died, 1859.
No. 66. (1812.) Eleazar Thompson Fitch, Y. C., 1810. D. D., Livingston professor of divinity in Yale College from 1817 till his resignation in 1852. His private instructions in theology constituted the germ of the Yale Theological Seminary, with which, established in 1822, chiefly by the efforts of Professor Goodrich and himself, he long retained his highly valued connection.
No. 67. (1812.) Edwin Wells Dwight, Y. C., 1809. Clergyman at Richmond, Mass. Died, 1841.
No. 68. (1813.) Ward Safford, Y. C., 1812. Minister in New York, and founder of city missions in America. Died, 1851.
No. 69. (1813.) Elisha Mitchell, Y. C., 1813. D. D., professor of natural sciences in the University of North Carolina. Perished in 1857 on a mountain in that State, which has since received the name of Mitchell's Mountain.
No. 70. (1814.) Zedekiah Smith Barstow, Y. C., 1813. D. D., minister at Keene, N. H. Dr. Barstow had among his pupils many who have since risen to eminence.

No. 71. (1815.) Randolph Stoxe, Y. C., 1815. Was the last man who held the office of butter in Yale College. Became a minister, and labored on the Western Reserve, in Ohio. Died, 1840 .
No. 72. (1815.) Ebenezer Semby, Y. C., 1814. A lawyer at New Haven and mayor of the city. Removed subsequently to New York.
No. 73. (1816.) Zedekiaf Smith Barstow, again, for one quarter.
No. 74. (1816.) Rufus Woodmard, Y. C., 1816. Died, 1824. (See an elegy by Brainard "On the death of Mr. Woodward at Edinburgh.")
No. 75. (1816.) Joseph Dresser Wickiam, Y. C., 1815. Was the last amanuensis of President Dright. Afterwards minister to Owego, N. Y., and for many years principal of the Burr Seminary, Manchester, V't.
No. 76. (1817.) George Hile, Y. C., 1816. United States consul in Asia Minor. (See Ererest's Poets of Connecticut.) Appointed.
No. 77. (1817.) Wmliam Chatncey Fowler, Y. C., 1816. Professor in Middlebury and Amherst colleges and author of an elaborate treatise on English grammar and of the History of the Chauncey Family.
No. 78. (1818-1820.) Hector Humphrers, Y. C., 1818. Professor in Trinity College and president of St. John's College, Maryland. Died, 1857.
No. 79. (1820-21.) Edward Turner, Y. C., 1818. Professor in Middebury College. Died, 1838.
No. 80. (1821-1823.) Stephen D. Wird, New Jersey College (Princeton), 1819. Clergyman in Maine and Massachusetts. Died, 185s, at Agawam, Mass.
No. 81. (1823-1825.) Henry Herrick, I. C., 1822. Clergyman at Exeter, Otsego County, N. Y.
No. 82. (1825.) Smeon North, Y. C., 1825. D. D., LL. D., president of Hamilton College.
No. 83. (1825-26.) Geonge Ňiffols, Y. C., 1824. Teacher in Hadley and in Springfield, Mass. Died in Springfield, 1841.
No. St. (1825-1829.) Robert McEwen, Y. C., 1827. D. D., clergyman at Enfield, Mass.
No. 85. (1829-1831.) Asa Drury, Y. C., 1829. Profesoor in Cincinnati College, Ohio.
No. 86. (1831-1833.) Noan Portrr, Y. C., 1831. D. D., professor in Yale College.
No. 87. (1833-34.) John Ohen Colton, Y. C., 1832. Pastor of the Chapel street church, New Haren. Compiler of Colton's Greek Reader. Died, 1840.
No. 88. (1834-35.) Samuel W. S. Dutton, Y. C., 1833. D. D., pastor of the North Church, New Haven.
No. 89. (1835-36.) Charlee Alonzo Gager, Y. C., 1835. Died, 1841, in Egypt.
No. 90. (1836-37.) Nelson Wheeler, Y. C., 1836. Profescor in Bromn University. Died, 1855.
No. 91. (1837-38.) Willard Mason Hirding, Y. C., 1837. Minister at Princeton, Mass.
No. 92. (1838.) Robert Hammton Paddoce, Y. C., 1837. M. D., professor in Starling Medical College, Ohio.
No. 93. (1839.) Isatac Jennings, Y. C., 1837. Ninister at Stamford.
No. 94. (1840.) Hamley Olmstead, Y. C., 1816. At a meeting of the committee of the Hopkins Grammar School, in New Haren, July 28, 1849, the following minute was adopted, to be entered on their records:
"Mr. Hawley Olmstead, principal of this school, having resigned his place in the same, on account of impaired health, the committee learn with regret the necessity of this measure, and return Mr. Olmstead their thanks for his faithful serrices, since for more than ten years he has managed the school with great
ability and success, having, by thorough instruction and discreet and efficient government, raised it from a very depressed state to one of great prosperity and usefulness. The committee would express their sincere hope that Mr. Olmstead, when released from his confinement and severe labors, may be speedily restored to his former health and enabled to resume, in some form, those efforts in the cause of education for which he is eminently qualified, from his long experience.
"Toted, that a copy of the foregoing be presented to Mr. Olmstead.

> "Janes L: Kingsley, Secretary pro tem."

No. 95. (1849.) Edivard Olmstead, Y. C., 1845.
No. 96. (1854.) Robbins Little, Y. C., 1851.
No. 97. (1854.) James Morris Whiton, Y. C., 1853.
No. 98. (1866.) Henry Norton Johnson, Yale, 1861, son of Hervey and Sarah (Pardee) Johnson, was born in Meriden, Comn., on June 11, 1831. He entered college in 1855, but left during the second term of the sophomore year to earn money by teaching. After two years thus spent in the public schools of New Haven, he reentered college in September, 1859.
After graduation he remained in New Haven, and had nearly completed the course in the Theological Seminary, when he became rector of the Hopkins Grammar School, in the fall of 1864. Under his administration the school attained great prosperity. He resigned his position in 1873 and spent the next four years abroad. After his return he resided chiefly in New Haven, taking occasional private pupils. The last years of his life were spent in his native city, where he was engaged in developing some real estate which he owned. He was found dead from syncope on the floor of a bath room in his boarding house on-the morning of April 24, 1892. He was not married.
No. 99. (1873.) Willini Lee Cushing, Yaie, 1872. Was born in Bath, Me., on July 2t, 1849. From 1872 to 1873 he taught in the Hartford High School; from 1873 to 1885 he was rector of the Hopkins Grammar School; from 1885 to 1887 he studied in Athens, Greece; from 1887 to 1888 he was instructor in Yale. In 1888 he became head master of the Westminster School, formerly at Dobls Ferry, N. Y., now at Simsbury, Conn., and still holds that position.
On April 6, 1876, he married Miss Mary-Lewis Strong. Their children are as follows:

1. Josephine Dodge Cushing, born June 26, 1878; died December 20, 1878.
2. Charles Cyprian Strong Cushing, born October 27, 1879; who is a member of the class of 1902 of Yale University.
3. Philbrook Cushing, born September 22, 1882; died November 10, 1892.
4. William Strong Cushing, born November 30, 1886.
5. Lee Woodward Cushing, born June 3, 1891; died January 11, 1898.

No. 100. (1885.) George L. Fox, Yale, 1847.

The following biographical records of the seven trustees of the Hopkins Grammar School whose names appear in the annual catalogue of July, 1875, was compiled by Mr. Thomas R. Barnum, H. G. S., 1875, from the obituary record of the graduates of Yale University and from other records:

HENRY WEITE, M. A. ${ }^{1}$
(Elected trustee, 1839.)
Henry White (1821), son of the Hon. Dyer and Hannah (Wetmore) White, was born in New Haven, Conn., March 5, 1803.

From 1823 to 1825 he served as a tutor in this college. He then studied law and entered on its practice in 1828 in his native city, where he continued to reside until his sudden death, from neuralgia of the heart, October 7, 1880, at the age of 77. His tastes led him to appear rarely in court, but he was specially occupied in the settlement of estates and the care of trust funds, and in these duties had the entire confidence of the community through a long life. He was also much interested in matters of local history, and had given particular attention to the compilation of a history of the ownership of land in New Haven. He was one of the founders of the New Haven Colony Historical Society and also its first president. For nearly half a century he was a deacon in the Center Church. He was married January 7, 1830, to Martha, daughter of Roger Sherman, of New Haven, and granddaughter of the Hon. Roger Sherman (she survives (1880) with six of seven sons).

THEODORE DWIGHT WOOLSEY, D. D., LL. D.
(Elected trustee 1840.)
Theodore Dwight Woolsey (class of 1820, Yale College), the sixth child and youngest son of William W. and Elizabeth Woolsey, of New York, was born in that city October 31, 1801. The family removed to New Haven in 1805, where his mother, who was a sister of President Dwight, died in 1813.
Soon after graduation he began the study of law (with no intention, however, of practicing it) in the office of Charles Chauncey, esq. (Yale, 1792), of Philadelphia, a brother of his stepmother. In 1821 he entered Princeton Theological Seminary, but was recalled to Yale by the offer of a tutorship in June, 1823. While in this office he pursued further theological studies and was licensed to preach in 1825. In the summer of that year he resigned the tutorship, and in May, 1827, went to Europe, where he remained until July, 1830, mainly occupied in the study of Greek in France and Germany.

Soon after his return he was elected, in September, 1831, to the professorship of Greek in Yale College, Professor Kingsley's chair of ancient languages being divided for this purpose. After fifteen years of eminent service in this capacity, he was advanced, on President Day's retirement, in August, 1846, to the presidency of the college, which he held until his resignation, in July, 1871. He was then immediately elected a fellow of the corporation, and this position he held until the acceptance of his resignation in October, 1885. He died in New Haven, of old age, on the 1st of July, 1889, in his eighty-eighth year.

- In the period of his professorship he published editions of four Greek tragedies and the Gorgias of Plato, which marked an epoch in the progress of classical study in America. In the same period he was associated with other gentlemen in the establishment of the New Englander (1843), to which his contributions were numerous and weighty.

As president, besides the great work which he did in advancing the scholarship of the whole college, he undertook the instruction of the senior class in history, political science, and international law. One result of these studies was his valuable introduction to the study of international law, which was published first in 1860, and has passed through four enlarged editions; other results were a volume on Divorce and Divorce Legislation, which appeared in 1869 (2d edition in 1882), two volumes on Political Science, published in 1878, and one on Communism and Socialism (1880). Dr. Woolsey was ordained at the time of his induction into the presidency, as he viewed the call to that office as involving responsibilities analogous to those of the pastorate. By his preaching in the college chapel, and by the influence of his character, he impressed himself in a striking degree upon his students. A volume of his sermons, entitled "The Religion of the Present and the Future," was published in 1871.

From 1872 to 1880 he devoted much time to the revision of the New Testament, serving as the chairman of the American company engaged in that work.

The degree of doctor of laws was conferred on him by Wesleyan University in 1845 and by Harvard University in 1886, and that of doctor of divinity by Harvard in 1848.

He married, September 5, 1833, Elizabeth Martha, only daughter of Josiah Salisbury, of Boston, who died on November 3, 185\%. Her children were three sons and six daughters, of whom one daughter and one son (Yale, 1872) are still living. President Woolsey next married, September 6, 1854, Sarah S., daughter of Gilman Prichard, of Boston, who survives him, with two daughters and one son (Yale, 1881), an elder son having died in infancy.

## ELI WHITNEY BLAKE, M. A.

(Elected trustee 1846.)
Eli Whitney Blake (class of 1816, Yale College) son of Elihu and Elizabeth (Whitney) Blake, was born in Westboro, Mass., January 27, 1795. After spending the year succeeding graduation in the Litchfield (Conn.) Law School, he then, at the request of his uncle, Eli Whitney (Yale, 1792), the inventor of the cotton gin, who was engaged at the same time in the manufacture of firearms for the Government, abandoned a professional career and entered his uncle's employ in connection with the gun manufactory at Whitneyville, in Hamden, just outside the bounds of New Haven. He continued in the same business with one of his brothers after Mr. Whitney's death, in January, 1825, until 1836, when he and lis two brothers established in Westville, another suburb of New Haven, a manufactory of house-furnishing hardware, which he carried on for about thirty-five years, until old age made his retirement necessary.

In 1855 he served on a committee which had charge of the macadamizing of one of the principal streets of New Haven, and thus had his attention drawn to the need of a machine which might perform the labor of crushing stone into small fragments. In 1857 he perfected the invention of a machine for this purpose and for use in mining, which for originality, simplicity, and effectiveness has received the highest praise and has proved to be of the utmost practical value. Mr. Blake made several other important inventions while engaged in the manufacture of arms, and continued until very late in life an enthusiastic student in the higher mathematics and physics. In 1882 he collected and printed in a small volume ( $61 \mathrm{pp} ., 8^{\circ}$ ) some of his most important papers, with the title, "Original solutions of several problems in aerodynamics." In 1879 the degree of doctor of laws was conferred on higo by his alma mater.

After an old age of honored retirement, followed by a few weeks of extreme feebleness, he died at his home in New Haven, August 18, 1886, in his ninety-second year.

He married, July 8, 1822, Eliza M., daughter of Edward J. and Mary (Pierpont) O'Brien, of New Haven, who died in 1876. Of their twelve children, six sons and four daughters lived to maturity; the daughters and three of the sons survive their parents. Five sons were graduated at this college, the remaining son being prevented from completing his course by ill health.

## THOMAS ANTHONY THACHER, LL. D. ${ }^{1}$

(Elected trustee 1854.)
Thomas Anthony Thacher (1885) was born in Hartford, Conn., January 11, 1815, the son of Peter and Ammie (Parke) Thacher.

After graduation day he taught for a few months in the academy at New Canaan, Conn., and then for three years in Georgia. On the 1st of December, 1838, he entered on the duties of a tutorship in this college. From this office he was adranced in August, 18t2, to the professorship of Latin, and in this relation to the college he continued intil his death. Besides his eminent success as an instructor, he was a most valued officer in the discipline and general arministration of the college, and most happy in securing the confidence and regard of successive generations of students. Many of the most important benefactions received by the institution during his term of office were obtained through his wise and unremitting activity. His time and strength were given without stint to college affairs, but he was able also to evince his interest in public education by serving as a member of the State board of education from its foundation, in 1865, until his resignation, in 157. The degree of doctor of laws was conferred on him by Western Reserve College in 1869. For some ten years before his death Professor Thacher had been hindered in the full discharge of his duties by a liability to attacks of angina pectoris, and the fatal reault had thus been a matter of long anticipation. The end came very suddenly in the early morning of April 7, 1886, at his home in New Haren in the seventy-second year of his age.

He married, September 16, 1846, Elizabeth, second daughter of the Rer. President Jeremiah Day, who died May 18, 1858, leaving five sons, who are all graduates of the college. He next married, August 1, 1860, Elizabeth D., the youngest child of Roger Sherman, esq., of New Haren.

## HENRY COIT KINGGLLEY, Ni. A.

(Elected trustee 1860.)
Henry Coit Kingsley (Yale, 1834) was born in New Haven, Conn., December 11, 1815, the second son of Prof. James L. Kingsley (Yale, 1799) and Lydia (Coit) Kingsley.
After graduation he was employed for a few months as a private tutor, and in the autumn of 1835 entered the Tale law school. Here he studied for two years, with the exception of the winter of $1836-37$, which he spent in a law office in Columbus, Ohio. In December, 1837, he was admitted to the practice of law in Ohio, and established himself in Cleveland, in partnership with his brother (Yale, 1832). He married September 6, 1841, Miss Cornelia H., elder daughter of John Day, of Cleveland, who died August 31, 1843, leaving a daughter, who died in 1862. He married again August 26, 1846, Mrs. Jane Handy, of Utica, M. Y., daughter of Briggs W. Thomas, of that place. He continued actively engaged in the practice of his profession, uniting with it land agencies, until the summer of 1852 , when, in consequence of the impaired health of himself and his wife, they went to Europe. On returning, in 1853, he removed his residence to New Haven. In 1854 he was elected a director of the Cleveland and Pittsburg Railroad Company, which was then seriously embarrassed and in 1857 became insolvent. From 1857 to 1866 Mir. Kingsley had the principal charge of the financial affairs of the company, which in 1862 regained a sound position.

In July, 1862, he was elected treasurer of Yale College, and he remaned in this office until his death, fulfilling also during the same time many responsible private trusts with rare efficiency. On the morning of the 19th of November, 1886, while driving to his business, he received a severe injury. A cart was driven against his

[^2]camiage, and as the result he was thrown violently forward ùpon one of the wheels. Two ribs were broken and other injuries were received. For some weeks he seemed to be in a fair way to recover, when unfavorable symptoms developed, and after severe and protracted suffering he passed away on the morning of December 19, at the age of 71 . His wife survives him, without children.

Mr. Kingsley's services to the college which he loved so well, rendered as they were at much personal sacrifice, during years of feeble health, deserve the fullest and most grateful recognition. His acute and rapid judgment, his caution, and his thoroughness have made the years of his administration of the college finances a notable period, while his personal character commanded the respect and admiration of all who were brought into intimacy with him.

ALEXANDER CATLIN TWINING, LL. D. ${ }^{1}$
(Elected trustee 1863.)
Alexander Catlin Twining (Yale, 1820), son of Stephen Twining (Yale, 1795) and Almira (Catlin) Twining, was born in New Haven, Conn., July 5, 1801.

He left college with the intention of entering the ministry, and soon after studied for one year in Andover Theological Seminary. In 1823 he returned to New Haven as tutor in the college, in which office he served for two years. In the meantime he had decided to become a civil engineer, and now went to West Point to prepare himself for his profession. He was first employed upon the State works of Pennsyl vania, and his earliest independent work was in 1835 to 1837, as chief of the survey for the Hartford and New Haven Railroad. He was subsequently employed either as chief or consulting engineer upon every railroad running out of New Haven, except possibly the Derby road. In like manner he was employed on the northern lines running up the country through Vermont, on the Lake Shore road between Buffalo and Erie, and on other roads in Ohio, Illinois, and Michigan. From 1839 to 1848 he filled the chair of mathematics and natural philosophy in Middlebury College, Vermont. This position he resigned to give himself more fully to his engincering labors. He removed from Middlebury to New Haven in 1852, and resided there for the rest of his life. From 1856 until his death he was a deacon in the First Church, in which his father had filled the same position. For several years after his return to New Haven his labor was mainly given to the development of his invention for the artificial production of ice on a large scale and with economy. The principle of his invention was widely adopted, but he failed to secure pecuniary recompense for it. He made valuable original investigations in astronomy, mathematics, and physics, and was equally interested in questions of theology and political science, both in their theoretical and practical aspects. In connection with the remarkable star shower of November, 1833, he deserves the credit of first suggesting the correct theory of radiation of meteor tracks from a fixed point among the stars. Early in October, 1884, he was attacked with congestion of the brain, and he died at his home in New Haven on the 22d of November, in his eighty-fourth year.

He married March 2, 1829, Miss Harriet Amelia Kinsley, of West Point, N. Y., who died October 12, 1871. Their children were three sons (graduates of the college) and four daughters. They survive their parents, with the exception of one son, who died in the war.

## SIMEON EBEN BALDWIN.

(Elected trustee 1869.)
Simeon Eben Baldwin (Yale, 1861), son of Hon. Roger Sherman Baldwin (Yale, 1811), and Emily (Perkins) Baldwin; born in New Haven, Comn., February 5, 1840.

He prepared for college at Hopkins Grammar School. During the first year after
graduation he studied law at Yale law school and also in the office of his father in New Haven. After one term in the autumn of 1862 at the Cambridge law school, he completed his preparatory studies in New Haven, and was there admitted to the bar September 4, 1863, and has since resided in that city.

He is a leading member of the New Haven Civil Service Reform Association; a member of the commission which prepared the General Statutes of 1875; a member of the executive committee of the American Bar Association, in the organization of which he was very active, being president during 1890 and 1891.

In 1883 he was delegate to the National Congregational Council, and in 1884 was chosen president of the New Haven Historical Colony. He has issued a number of publications.

Was married October 19, 1865, to Miss Susan Winchester, of Boston, Mass., and has had three children: Florence Winchester, born January 3, 1868, died September 16, 1872; Roger Sherman, born January 17, 1869; Helen Harriet, born January 27, 1872.

In 1893 he was associate judge of the Connecticut supreme court of errors.

## CHAPTER XXIII.

## THE LANGUAGE QUESTION IN GREECE AND SONE REFLECTIONS SUGGESTED BY IT.

By (Dr.) Daniel Quinn.

The art and habit of recording thought in writing distinguishes the civilized man from the barbarian. Well known, indeed, are many of the traits by which the man of culture, directly by virtue of his habit of reading and writing, is marked off as different from the unlettered boor. But yet this habit produces many other great results that usually are not estimated at their full value. One of the more noteworthy of these is the fact that in nations where the use of letters is intense and constant the inhabitants become bilingual, or, to use a term which may be more proper, diglossic.

Without here inquiring into the causes, it may be stated as a historic truth that in the past ages of culture few men, or none, have ever written lengthy treatises in a language constructed entirely and exclusively out of words and expressions adopted from the genuine conversational tongue of the unlettered classes. And, furthermore, no man when conversing about the small affairs of daily life employs the carefully selected words and constructions which by a kind of acquired instinct he is forced to use when he undertakes to perform a literary feat. This phenomenon can not be adequately appreciated by scholars who live in countries where all the inhabitants, if not themselves actually more or less educated by means of letters, are continually under the direct influence of lettered men. But inability to appreciate the magnitude of this phenomenon does not necessarily engender a desire to deny its existence. The man who never learned writing and composition often feels himself incapable of dictating an ordinary note even when in his own modes of expression he is fully able to communicate all the successive statements which he wishes to be incorporated therein. His helplessness in such cases consists not in ignorance of what he wishes to express, but in the consciousness of his not knowing the phase of language which is proper for the written document.
The phenomenon of diglossy does not suppose that the inhabitants of one and the same locality speak two languages so unlike as to be conceded by all to be entirely distinct, as, for example, where certain communities of Germans or French in North America speak not only a variety of English, but also a variety of their ancestral Teutonic or Latin tongue. These colonists can not by reason of the retention of their mother tongue, in addition to their acquired faculty in English, be said to be merely diglossic. They are bilingual out and out. Diglossy simply supposes that in a given community the phase or quality of language used by the educated classes is notably different from that of the lower strata of society; or, again, that the written language of the educated classes is different from their spoken language, because of their tendency in written language to imitate more ancient or classical composition, while in spoken intercourse they keep closer to the mode of speech in vogue

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among those who are not educated. However, the difference between these two phases of one and the same basic language may sometimes become so wide that this diglosey does actually merge into bilingualism.

Wherever diglossy exists it is correct to say that each phase of the language continually disturbs the other phase. The language of the educated class does not cease to adopt words and phrases and constructions and modes of pronunciation that had hitherto been exclusively the property of the language of the uneducated; and conversely, the uneducated classes similarly borrow and assimilate expressions that had been coined in the more aristocratic mint of the educated. Perhaps the ideal is realized in proportion as the efficiency of this reciprocal influence is effective in keeping the two phases of language near to each other and in preventing the rise of bilingualism.

Although the prevalence of diglossy is an indisputable and well-known fact, especially to students in linguistic research, its psychological causes have not yet been thoroughly investigated by scientific inquiry and have not yet been expressed in simple formulas which the layman might easily comprehend. Fortunately these causes are not the chief matter in question in this present essay. Sufficient here is the fact that diglossy is already a recognized element worthy of linguistic, psychological, and sociological research, and that it is beginning to claim broader attention from the rotaries of these sciences, and especially from glossologists. Prof. Hermann Paul's investigations in this direction serve as one instance. In his admirable book on the Principles of the History of Language ${ }^{1}$ this noted profescor refers at length to both forms of speech and discusses the relations which the standard common written language of any given people bears toward the ordinary spoken tongue or to the dialects which make up the spoken tongue.

There are two kinds of diglossy. These may be distinguished from each other by the terms "homochronons" and "historic." ${ }_{2}$ When a nation or people, on account or having a past literature of which it is proud, and which has come to be regarded as classical, consciously and intentionally models its official and social language in conformity with this past literature, then the diglossy is of the historic kind. But in so far as diglossy arises from the bare fact that independently of all conscious historic motives, the educated man speaks differently from the uneducated one by the simple reason of his indulging in different and more complex sets of thoughts, it is homochronous only. Homochronous diglossy flourishes in every community where there exists a class of men, who, on account of their dignity in state, or religion, or wealth, or knowledge, or other kindred preeminence, form a higher and exclusive society, who in their mode of expressing thought, as well as in other respects become more careful, more conservative, more deliberate than the struggling lower classes. Practically this kind of diglossy is always historic as well as homochronous, for those who, under the influence of homochronous reasons, are not unconcerned about the artistic and other virtues of the language which they employ, are at the same time, under the influence of historic reasons, prone in speaking and writing to imitate fixed and acknowledged models of their literature.

In past ages of civilization it has occurred more than once that the breach between the literary idiom and the spoken language of great peoples gradually grew so inpassably wide, that such individuals as knew only the one phase of the language could neither address nor understand those who employed the other. It has happened that the state and the priesthood and the school adhered rigidly to a certain ancient style of language as classic or sacred, while the people at large, unrestrained by the conservative force of education, continued to modify their manner of speech year after year according to phonetic and other glossic laws. Not to mention other more

[^3]remote instances, we have the Latin and the Italian, which long existed side by side, the one as the medium of culture and government and religion, while the other was the language of the tradesman, the private individual, and the family.

Historic diglossy has for many centuries been rampant among the Greek speaking races. On account of the linguistic and literary eminence of the Greek language this diglossy has been and still is a choice topic for dispute amongst philologians. For the Greeks themselves the question is one of prime importance since it is not separable from many other national and historic interests of theirs. To a foreigner its attractiveness is of a very different kind, save in so far as his philhellenic inclinations may lure him into being interested in every thing Greek; it is the peculiar psychological and philological aspects of the case that claim his attention.

The two phases of language that constitute the diglossy of the modern Hellenic race are now usually distinguished as "demotic" and "katharevousa." Demotic is the common speech of the mass of the people; katharevonsa is the official medium and the language of written composition. The relation between the tro is very much misunderstood and misinterpreted, not only by some eminent foreign scholars, but even by many educated Greeks themselves. The demotic has a testy set of hot advocates and the katharevousa has a whole army of followers; and, as is always the case in the East, these rival advocates see nothing of good in the views of their opponents. The defenders of demotic use every possible weapon, honest and dishonest, to dethrone the katharevousa from its position of honor, and in turn many of the purists leave no means unemployed to heap obloquy upon the users of the "vulgar" tongue. Foreigners who take a hand in this fraternal war between demotic and katharevousa may be regarded as being meddlesome; all such have been warned off by native champions on either side of the dispute. Still, from a scholarly point of view, every question is open to every investigator. The present sketch is intended for other outsiders, who may like to know what is being done to settle, or rather to keep abroil, this important dispute.

All discussion that endeavors to discern the most efficient means for the solution of the difficulties occasioned by this diglossy, and of making the demotic and the katharevousa come closer together, belongs to a yet unwritten chapter of philology: The principles involved lie in a part of the domain of linguistics not yet honored by exhaustive research. Glossology has focused most of its illuminating rays upon the study of spoken language and has chosen to leave written composition in comparative darkness, deeming it worthy of notice only in so far as the written forms serve to recall the spoken tongue or where the forms used in written discourse happen to be identical with those of spoken language. The reciprocal relations and obligations of demotic and literary languages are not yet indisputably determined.

Speaking loosely and figuratively we say that language is continually in a state of growth. But when we make this statement we express a conviction formed by observations made in regard to spoken language. Whether literary language as distinct from vocal speech also grows or not is a different inquiry, which indeed may likewise be answered in the affirmative, but its growth is not in all respects coordinate with the growth of spoken language. The language employed in the rude creations of primitive poetry and oratory can not well be widely different in morphology and syntax from the contemporary oral speech or some dialect thereof. But as soon as a literature worthy of universal reverence has been created and recorded, from that time on does historic diglossy begin to exist. For it is of the nature of the admirers of such a literature that they should be desirous of imitating it whenever they speak on topics akin to those recorded in the literature, and especially when they themselves undertake literary composition. Thus it comes to pass that succeeding generations of ambitious writers and careful speakers look to their approved and idealized predecessors as models in language rather than to their commonplace contemporaries. In this way a class of more learned and influential inhabitants is formed, who prefer to employ the model language of literature.

The illiterate classes can not be imagined as entirely free from all the restraints that literature places on the language of the educated. The literary idiom, by its influence on the language of the uneducated, retards many of the perpetual changes which untrammeled vocal speech is heir to. Accordingly, language that possesses a literature does not develop just in the same way nor with the same rapidity as the savace dialects that are entirely unincumbered with such a precious burden. The briefest study of our own vernacular language will bring some proof of the fact that literature shackles the rapid changes that speech is otherwise liable to. We can not assert that our English language of to-day is "growing" in the same glossological sense as we can say that the ever-changing languages of the wild natives of Africa are "growing." Nevertheless, our language is probably growing more vigorously than theirs, but with a very different and nobler kind of growth, increasing in quantity and accuracy rather than simply undergoing phonetic changes. Let us make the strange supposition that all those who speak English were to lose their literature and all their other written documents, and henceforth were never to read again, they and their children, forever. Then, from that time on the English language, freed from the despotism of letters, would immediately begin to "grow" luxuriantly.

The investigator can defend or condemn modern Hellenic diglossy only after becoming acquainted with the entire history of the language that the Greeks have used in spoken word and written page since classic antiquity down to the present day. In Kuhn's Zeitschrift for 1888 Dr. Paul Kretschmer, in a treatise on the linguistic peculiarities of such inscriptions as are read on old Attic rases, has collected a number of interesting examples that indicate the striking differences between the literary and the popular idioms of Attika in ancient times. ${ }^{1}$ Kretschmer's inscriptions show that within the narrow limits of the single city of Athens, and at the time when the Attic language was in the zenith of its perfection, a clearly discernible diglossy existed. This ancient disagreement between the demotic and the literary language was not merely a number of variations in syntactical construction and a difference in vocabulary, but included, also, more noteworthy morphological divergencies in the forms and types of words.

From statements made here and there in the writings of the old authors it can easily be deduced that the Athenians themselves were not ignorant of the difference between their artistic language of literature and the careless language of the multitude. In a treatise on the constitution of Athens which, although it is usually incorporated with the works of Xenophon, seems to be of unknown authorship ${ }^{2}$ it is recorded that the Athenians, in consequence of their continual intercourse with other men, "hear every kind of speech, and from one man's discourse they adopt some special peculiarity and from another's some other mannerism; and while the other Greeks speak a language native to themselves, the speech of the Athenians is made up of contributions from all the Greeks and all the barbarians." ${ }^{3}$ In his letter to Q. Elius Tubero, "On the characteristics and peculiarities of the writings of Thoukydides," and in his second letter to Ammaeos, "On the peculiarities of the writings of Thoukydides," we have the judgment of Dionysios of Halikarnassos, an eminent critic who lived in the first century before Christ, in testimony of the artistic and artificial character of the language of this admirable historian. He finds fault with Thoukydides for using words and phrases that were not commonly understood and were in need of interpretation, others that were obsolete, others that were proper only for poetical composition, and others that were foreign to the Attic dialect. These criticisms refer directly to the historian's language.

[^4]Athens had become a world city, and it is to be supposed that in the variegated underclasses there flourished a mixed and corrupt dialect. Athens possessed a multitude of slaves much more numerous than its population of free citizens. In his book called "The Deipnosophists," Athenaeos quotes from the chronicler Kitesikles concerning a census made in Athens in the year 309 B . C., under the direction of Demetrios of Phaleron. According to this census, the population consisted of 400,000 slaves, 10,000 resident strangers, and only 21,000 native Athenian citizens. ${ }^{1}$ Very few of these slaves were of Attic blood. Most of them were not Greek at all. ${ }^{2}$ Therefore, neither the Attic dialect nor any other kind of Greek was their native form of speech. They certainly contributed greatly to the corruption of the spoken language. All members of Athenian families were in close and daily communication with these slaves from childhood to old age. The pedagogues, under whose continual care young boys were placed, were always chosen from among the slaves, and therefore were often foreigners. Platon mentions two such pedagogues, and refers to their "barbarous" way of speaking Greek." Accordingly, when, in a dialogue between Sokrates and Alkibiades, Platon teaches that the people of Athens are competent masters in the Greek language, he must be interpreted as referring not to the entire mass of the inhabitants, but to the limited class with which Alkibiades was accustomed to associate. ${ }^{4}$ Ancient comedy sought at times to draw humor from faulty or foreign pronunciation. It also employed such methods of pronunciation in order to expose its victims to ridicule or dirgrace. Two extant fragments from lost plays of the comic poet Platon are especially to the point. In four lines from his "Hyperbolos" we read that the noted demagogue of this name, whose father was a foreigner and a slave, did not pronounce like other Attic citizens. ${ }^{5}$ And in his drama called "Kleophon," the mother of this busy politician was introduced under the name of "Thrassa," and was made to speak, not like an Athenian matron, but after the manner of a woman from Thrake. ${ }^{6}$
Long before the great epoch of literary activity at Athens, which is represented by such masters of prose as Thoukydides and Platon and Demosthenes, and by such poets as Aeschylos and Pindar and Sophokles, the language of inspired composition had become different from the language of daily life. At the very dawn of Greek literature the immortal Homeric songs, which the unknowing may think to have been composed so artlessly, present a mixed dialect which is highly artificial, and which never was spoken anywhere. Of this fact, otherwise patent enough, we have the glossological testimony of Professor Brugmann, who finds that a proper expression to name the Homeric language by is the term "Kunstdialekt." ${ }^{7}$ From its origin down to the present day the literary language of Greece has had a career of its own akin to that of the spoken tongue, but separate, nevertheless. As soon as it came into existence it started out to fulfill its own purposes, which were not just the same as those of oral speech. True it is that the literary language sprang from the spoken tongue, but, like many another child, it after a time came to possess rights equal with those of its parent. Fortunately, however, it never ceased to be influenced more or less by the spoken language, except, perhaps in the middle ages, and in turn was not without influence upon its parent. Complete harmony between the demotic and literary phases of a language can never be realized. Such harmony would be necessary if languages were in a state of ideal perfection. But we are here concerned not so much with what is perfect as with what is historically a fact.
Certain languages of the past are commonly described as "dead." This expression, like many others that have been employed in this study, is not literal, and

[^5]often is misinterpreted. It may indicate not so much the condition of the language in question as the condition of our knowledge in regard to it. Ancient Greck is not dead in the same manner as is the speech of the ancient Hittites. We know that there once existed a Hittite language, simply because it has been discovered that \& Hittite people once existed, and we necessarily suppose that they possessed a language. But with the ancient Greek the case is entirely different. It has not been entirely lost. In its written form it has been preserved to us just as truly as has been preserved to us the English of the century that has just closed. The ancient spoken Greek has been preserved in so far as it is contained some way or other within the written dialect.

The preeminent political and literary importance of Ithens in classic days, and the artistic beauty of the rich, expressive, and precise language which the Athenian writers created and employed, gare occasion for Attic language as well as Attic style in composition to be gradually adopted as model by nearly all Greek writers, even by those who lived and wrote afar from Athens, in Italy, or Asia, or elsewhere in the Hellenic diaspora, and who in ordinary conversation spoke a tongue, or at least a dialect, rery different from the Attic of Athens. There were worthy exceptions indeed, but not many. An apposite illustration of this growing belief in the eminence of the Attic dialect and its common acceptance among all Greeks as the universal medium of culture and refinement may be found in the words which Thoukydides reports Nikias to have said to his soldiers in the harbor of Syracuse in the year 418 B. C. Wishing to encourage his men, who were about to fight a hopeless but necessary battle, he first addressed those that were Athenian citizens, and then turning to the allies, who were Greeks from other countries, he said that "they should remember that although not Athenians they could boast of being regarded as such, and that on account of their knowledge of the Athenian dialect and Athenian customs they were an object of admiration throughout the other parts of Greece." ${ }^{1}$

Then, in the latter half of the fourth century before Christ, came the rast military expeditions and victories of Alexander the Great. The most important result of the conquests of Alexander and his successors was that the Hellenic type of civilization and the Hellenic language became common in many of the newly conquered countries. The language was propagated through the medium of army and government and schools and theaters and gymnasia and other Hellenic institutions which the conquerors introduced. These non-Hellenic nations, who thus became Mellenized, learned the common Attic rather than the other local dialects of Greek, and learned the written type of Attic rather than the colloquial forms that were peculiar to Attika. Thus, in this new and vast Greek world the written Attic came to be the model, not only for literary composition, but also for the spoken tongue. And it would seem that, theoretically considered, the gap between the spoken and the writien form became quite narrow for a time. But since the great mass of those who learned to speak the imported language were outsicle the pale of education and far from the influence of schools, the gap soon began to widen, and from that time down to the beginning of the present century there happened no event of sufficient moment to cause the gap to be again closed up.

The language which thas became universal from the beginning of the fourth century before Christ was, although Attic in origin, in many respects different from its prototype. From the fact that it was the only type of Greek which could be regarded as in no way merely a local dialect it came to be designated by the new name of "Kone," or "common tongue," and under this name is it known in the history of literature.

The differences between the Attic and the Kcene are in part explained by ordinary linguistic and psychological laws, and in part by the fact that the Kone first took

[^6]shape not within Greece itself but in countries beyond the limits of pure Hellenism, ${ }^{1}$ chiefly in Egypt and Asia Minor. From these countries it finally rolled back into Greece itself, where the first noted employer of this new type of language was Polybios, the historian. Words and phrases which were exclusively and extremely Attic began to disappear, giving way to more commonplace expressions, or to more simple ones. Rare and irregular grammatical forms were gradually dropped, and were replaced by new forms constructed according to an apparently more logical analogy. The useless dual number disappeared. A preference for diminutives unconsciously grew up. These innovations, and others of a similar nature, finally brought the written Kœne to differ considerably from the Attic.

There is a divergence of opinion among critics regarding the merits of the Kone. Nany pronounce it much inferior to the Attic. The truth is that a great amount of literature was produced in it, much of which deserves no high praise. But inferior literature does not necessarily presuppose inferior language. An unprejudiced critic may experience no difficulty in agreeing with M. Émile Burnouf, who, in his history of literature, teaches that in many respects the language of Polybios, who flourished in the Greco-Roman epoch, was superior to that of Thoukydides and Xenophon. ${ }^{2}$

The creation of much worthless literature in the Kœene gave occasion for a new school of rhetoricians and writers to arise, who, seeing nothing of good in the language and style of contemporary literature, advocated a linguistic renaissance, a return to the methods of those who centuries before had written in the dialect of Athens. These are the so-called Atticists. Among these regenerators of the past there were many scholars and writers of high value. Although they had a number of worthy opponents, yet they succeeded in making their opinions prevail. From the time of Augustus down to the reign of Alexander Severus, and even later, they gave the tone to Greek language and to Greek and Latin prose literature. ${ }^{3}$ One of the most celebrated of these Atticists was Dionysios of Halikarnassos, who wrote in Rome in the first century before Christ. Fortunately most of his writings are extant.

A near and natural consequence of this attempt to rehabilitate the style and language of the Attic writers of a past period was the necessity of accurately fixing the limits of that model perior, of determining with certainty when it began and when it closed, and of knowing in an authoritative way the relative merits of the various writers that flourished during that period. Accordingly scholars set to work to discover who of the ancient writers were worthy of being regarded as model and who were not so. The works approved by these critics were then put forward as "canons" or models for other writers and students. Lists were formed containing the names of such authors and their works. These lists also were called canons, like the writers whose names they contained. Canons of the various classes of peetical literature began to be made as early as the third century before Christ. The canon of the ten orators seems to have originated with the grammarians of Pergamon and perhaps as early as about 125 years before Christ; but the first clear mention of it is in the writings of the graminarian Caecilius, who lived in the Augustan age. ${ }^{4}$ The other canons that interest us here, as for instance that of the historians, may have originated in the Augustan age.

The effects of the decision of these critics have been lasting and great. As soon as

[^7]their opinion began to prevail, readers ceased to demand copies of such authors as were not listed and approved in the official canons, and accordingly these unfavored authors have most of them been lost; no one asked for them in the bookshops, and there was no incentive for copyists to reproduce them. It is from these Atticists and their teachings that the whole world has learned to regard certain Greek authors as classic. We usually do not inquire whether our judgment would agree with theirs or not, if appeal from their decision were made to us, and if the lost authors were to be found again. Agreement, however, is quite probable. Yet it is proper to think that the selection of a classical epoch and the exclusion or admission of individual authors, whose works lie in disputable borderland, may present serious difficulties. The acceptance or rejection of such authors is always a matter of subjective and personal choice.

It is not hard to find a justifiable excuse for the reverence which these Atticists felt toward the period which they designated and named as classical. When all Greece was under the depressing weight of foreign rule, first that of the Macedonians and later that of Rome, the noble-souled among the Greeks looked to their glorious past for the exemplar of everything exalted and good in their race. In language, therefore, as well as in other respects, they sought their ideal in ancient Athens. They had either to renounce the idea of having a model, or logically to turn to the noblest one within easy reach. Their action is worthy of respect, for the old Attic wa's not yet far off from the language of their own day. The gulf over which they had to leap in order to unite themselves with the ancient writers of Attic should be measured not by the years of its existence but by the ease with which the leap could be made.

But Atticism occasioned the widening of the breach between the language of the educated and that of the humbler classes. For while the Atticists emulated the language of Demosthenes and Xenophon, there was no one to care for the education of the populace, and their language naturally went on "growing." Whether the growth was toward perfection or disintegration is a question. Nevertheless the literary language, both in its Atticistic and in its more common form, continued to exercise restraining influence on the spoken dialect, for it was through the literary language that the Government and the new Christian religion communicated with the people. The "growth" was therefore less free than in foregoing epochs of equal duration; but the discrepancy continued to increase, and finally there arose a long series of writers who cut loose entirely from the oral language and who took little notice of the language in which people talked.

With this complete separation there came a greater need for grammars and lexicons. The beginnings of grammar go back, indeed, to the fifth century before Christ. Much later, in the second century, under the influence of the principles that brought the Atticists into existence, grammar was crystallized into the form which it retained throughout all the ages down to the begimning of the present century. The first of these text-books of grammar seems to have been that of Dionysios Thrax. This small treatise is still extant. When men are compelled to study grammar in order to learn how to speak and write properly, then literary language is highly artificial, and diglossy is of a very pronounced type. The grammar of Dionysios and the other grammars that were composed at that time or shortly after, either as independent works or based on the grammar of Dionysios, prove how difficult it then was for the Greeks to learn to write after the Attic models. In the first centuries of our era grammar became a conglomeration of mechanical rules, which sometimes entered into details concerning the proper use of individual words and phrases, which it would take a lifetime to master. How burdensome and how intellectually useless such studies were is immediately evident to anyone who takes the trouble of reading a few pages of the "Kanones" of Theodosios of Alexandreia, which were written toward the close of the fourth century of our era.

Still more than by the grammars is the existence of diglossy in those ages proven by the number and quality of the lexicons then in use. The beginnings of lexicography, like those of grammar, date from the fifth century before Christ, but copious dictionaries came into use only in the Roman period. In the Deipnosophists, a lexicon of Attic words composed by Philemon, of Athens, is several times referred to. If Philemon lived before Aristarchos, as Robert Weber maintains, ${ }^{1}$ then his collection of Attic words is the first lexicon concerning which any notice has been preserved. Of all the mass of lexicons that were then written, there remain extant the dictionaries of Harpokration and Polydeukes, the Attic words of Moeris, the lexicon written by an undetermined author who is known as Antattikistes, and excerpts from the lexicon of Phrynichos. All of these works belong to the first and second centuries of our era. From that time down lexicons were a matter of necessity, and not only were these copied and remodeled and used throughout all the middle ages, but many others were written. These lexicons and grammars finally served a useful purpose by being taken as the model and basis of the first dictionaries and grammars of Greek that were composed for western Europeans when, after the passing of the middle ages, Hellenic studies were revived in the West.

In regard to the demotic language the following recapitulation may now be made. In modern times the demotic and dialectic forms of language are in many countries accorded an honorable place in certain kinds of more popular literature. In classic Greek, however, and especially in Attic, the demotic hardly ever came up into book literature. Even in Attic inscriptions of a more careful kind the lauguage is not demotic. Still these inscriptions often give most trustworthy information about variations in spelling and pronunciation. Tradition has not interfered and introduced corrections and modifications here as in the manuscripts. Accordingly, from the information gathered together and systematized by Meisterhans ${ }^{2}$ and others, and from such researches as those of Kretschmer's mentioned above, and of Schwyzer's study on the language of the Attic imprecation tablets, ${ }^{3}$ it is possible to collect some slight knowledge concerning the demotic language of ancient Attika.

With the rise and propagation of the Kœne the demotic language entered upon a new period of its history. The numerous ancient dialects gradually died out. Although the modern demotic and its many dialects have not been all sufficiently studied for us to know just what relations they bear to the ancient language, yet the most reliable authorities confidently say that none of the old dialects have survived down to the present time, ${ }^{4}$ with the exception of sporadic remains here and there, and the exception of an old Spartan dialect which is still apparent in the Tsakonian language of the inhabitants of Kynouria, along the east slope of the Parnon mountains. ${ }^{5}$ The modern dialects seem, therefore, to be descended not from the ancient dialects, but from the literary Kœne.

From the age of the Atticists, when the literary language divorced itself from the spoken tongue, down to the twelfth century, this new demotic which, sprang from the Kœue and which superseded the ancient local dialects, remains almost unrecorded, in its pure form. The oldest samples of it are given in certain inventories and other documents referring to matters of business, which have been found among Egyptian papyri; the earliest of these specimens were written in the second century before Christ. ${ }^{6}$ From the first centuries of our era we possess a few specimens furnished by inscriptions. Then in Byzantine literature short excerpts from the vernacular language are occasionally to be found. But if all the brief and unsatisfactory samples

[^8]of the pure demotic preserved in the extant documents of these thousand years were to be collected together, they would fill only a few pages. Professor Psycharis and others furnish us with an index of the most important of these specimens. ${ }^{1}$

Besides the scant information collected from these few specimens of demotic, additional knowledge regarding the colloquial language of the first two or three centuries of our era is furnished in an indirect way by the "aphorisms" or bans which-the Atticistic lexicographers and grammarians pronounce against words and constructions that are not found in the classic writers. Whenever these guardians of the ancient forms of speech warn their readers against certain usages, it is logical to suppose that the warning was necessitated by the actual prevalence of the unapproved expressions in the language of ordinary men. Likewise whenever the "Antatticist" defends certain words against the bans of the Atticists, we may have reason to suspect that these words were then in vogue in the written language at least, if not also in the spoken. ${ }^{2}$

That the demotic did not in those days grow into a language entirely different from the literary Kone is a wonder. During the Christian ages perhaps the greatest factor in holding the spoken demotic so close to the written Kœne was the influence of the church. The ecclesiastical language was one of the common bonds between the higher and lower classes of people. The eastern church, by being a conservative and aristocratic institution, closely allied to the civil government in spirit and interests, gave to the State the example of preserving as its official language that form of the Alexandrian Kœne which had been made sacred in the writings of the first promulgators of Christianity. At the same time, by being the organ through which Christianity acted, the church continually and sympathetically came into intimate conversation with each and every individual of all classes of people, and kept every Christian's ears filled with words and phrases of the ecclesiastical tongue. The case is not parallel with what took place with the Latin language in the west. For although in a similar manner the western church kept to the literary Latin and at the same time kept in similar contact with the people, yet the Latin church used the Latin language, not amongst Latin men, but amongst races who were not conscious of having a Latin soul, and whose native language was often not Latin at all. If we take the word "Roman" in its mediæval sense, we may say that the eastern church was both Roman and Hellenic, Roman by its being the eastern division of the great empire, and Hellenic by the language of its people and other circumstances. But we can not say that the western church was correspondingly Roman and Latin; it was simply Roman. Moreover, the difference of ritual between the Latin and Greek liturgies did not allow the Latin Christian to sate his ears and soul with hymns and dozologies and troparia and lives of saints in the ancient and unchangeable language as did the Greek rite. Other causes also contributed, but perliaps in a less degree. The government, the tribunals of justice, the army, and especially the schools which were a kind of succursal to both church and state, aided largely.

In contrast with the meager remains of the medieval demotic of the Byzantine empire stands the great mass of writings which fully indicate to us the nature of the language which was used as the literary medium. This literary Kune of Byzantine times was to a remarkable degree a language of tasteless imitation, from the sixth century down to the fall of Constantinopol. But it was still plastic and capable of serving high literary purposes whenever by marvelous exception some one attempted to use it for more genial themes than dogmatical polemics or spiritless chronicles. Aside from the virtues or defects of the medium, it is hard to use any language artistically when such are the topics. But after all, the literature of Byzantion is not entirely an arid waste.

The rivalry which for centuries existed between the East and the West created

[^9]in the minds of the savants of Europe the habit of despising the products of the Byzantine intellect. This prejudice was long effective in keeping scholars away from Byzantine research. Only in these latter days has due attention been called to this quite unexplored field. Byzantine literature can not be respected in the same way as is the classic literature of antiquity. Nor should any man desire to see it serve purposes similar to those served by the ancient literature in universal education. Byzantine literature first began to be conveniently accessible when in the year 1648 a series of histories and chronicles began to be published in Paris under the direction of the learned Jesuit, Philippe Labbé. Uniortunately this excellent edition is now difficult to find, and students of Byzantine affairs are obliged to turn to the more complete but less careful Bonn edition, which was begun in 1828, under the warm recommendations of the historian Niebuhr. The study of European languages and literature and history could not become a complete whole so long as the Byzantine age and empire were unduly neglected. Accordingly, the unbiased demands of philological science have prevailed; and now there are a number of eminent Byzantinologues whose names and works may be learned from the Byzantine Magazine, ${ }^{1}$ edited by Professor Krumbacher, of Nunich. And amongst these students of Byzantine affairs there are some who devote their attention chiefly to the language, both demotic and literary.

After it had become customary for literary men to employ the traditional language, there wrote from time to time men who although really continaing to write in the ancient Kœne, yet yielded in some points to the spoken tongue of the common people, and took up a number of peculiar constructions which had been developed in the spoken language. This contamination from the demotic began to appear more clearly in the sixth century, and from that time on. It might be properly called a popularized form of the high Kœne. It is in principle identical with the written language of Greece of to-day. Probably it was not very different from the spoken language of the educated at that time. By collecting and classifying the new phenomena that appear in these authors, it is possible to show that many of the peculiarities of the demotic language of the present day were already common in the spoken language of that remote age. An excellent study of this kind made by Chatzidakis proves that the Greek language had then already changed its phonetic qualities, its syntax, its vocabulary, the significance of many words, and even certain types of words into the forms in which these various phenomena appear in the spoken Greek of to-day. ${ }^{2}$ This mixed language is to be found in the Chronicle written by Ioannes Malalas, of Antioch, possibly in the reigns of Justinian ${ }^{3}$ and his successor Justin II. ${ }^{4}$ Malalas was almost as uneducated as a man could be who would undertake to write. He composed his work not for the educated, but for the people and the monks. Both in style and in language he is uncouth and free from all ability to produce a work of art. He could not have written in a language greatly different from the spoken tongue, even if such had been his desire. Accordingly his work is a precious monument for the study of the colloquial language of the sixth century.

It was natural for Malalas to write in a language as near as possible to the demotic, since he wrote for the unlearned. His chronicle seems to have had wide circulation and to have been popular for centuries both in its original form and in epitome. It served as the model for a long series of chroniclers, who continued the kind of historiography of which Malalas was one of the pioneers. Accordingly, most of them wrote in a language very near to the common demotic for the two reasons that such was the language of their model and that such was the language best suited to the

[^10]readers intended. Thus, in another extant chronicle written by the monk Theophanes, ${ }^{1}$ which is a record of events that happened from the year 284 of our era down to the year 813, is a similar language employed. The language of Theophanes is indeed not of such a humble and inartistic kind as that of Malalas, yet, like this language of Malalas, it possesses a vocabulary and syntactical structure and also a few morphological peculiarities that render it quite easily distinguishable from the higher Kone.

In the following century there appeared a number of works which are connected in some way or other with the Emperor Konstantin Porphyrogennetos. ${ }^{2}$ Some of these works he seems to have simply caused to be written or compiled, and others he himself may have composed. Those which the emperor inspired simply are for the most part encyclopediac compilations from older works, and the language in these compilations is often that of the original writers. But in the works attributed to the aided or unaided authorship of the emperor himself ${ }^{3}$ the language is the popular kind used by Malalas and Theophanes. He not only freely borrowed from the demotic, but departed so far from the usage of the purists as to even introduce at times foreign words-Slavic ones, for instance-when they perhaps were in vogue locally as the names of certain objects.

The same tendency as that of these chroniclers to compose in a simple and popular language also appeared in other works intended for use among the people, as, for example, in the synaxaria or pious legends referring to the lives of the saints; but in most of the writings of the educated the old language was employed. The demotic language of the chronicles and synaxaria first received a place in literature during the almost inexplorable period of ignorance that is defined as beginning about A. D. 650 and ending about A. D. 850. This is the most mannown period of Byzantine history. During all the subsequent ages the simple language continued to assert itself, but not as the language of the educated. With the return to culture which followed these two dark centuries there came a return to the older type of Greek, especially to the Alexandrian. The first great name to be mentioned in this connection is that of the Patriarch Photios, whose language is notably archaic. From the age of Photios began the renaissance which bore so much literary fruit in the reigns of the Komneni and the Palrologs. The language of this renaissance was the ancient type of Greek.

This traditional Kœene was familiar only to the writers who used it and to others of their own class and of like education. The common man did not readily understand it and the soul of the common people no longer found congenial expression in it. In consequence there burst out from among the people a new variety of literature, written not in this classical idiom of churchmen and scholars and statesmen, nor even in the middle tongue of the successors of Malalas, but in a language based entirely on the demotic. And from the eleventh century on there flourished among the Greek-speaking peoples the phenomenon of the cotemporary existence in literature of three forms of language.

Although similar phenomena exist and may be observed to-day in the language of nearly all civilized countries, yet our attention is seldom convincingly drawn to this fact, and we are liable to be incredulous. In English literature America furnishes a ready illustration in proof of the existence of different strata of language; for in America there are writers of cautious and conservative style, who follow the older models and try to produce a classical type of English; then there are the writers in many of the daily journals, where a middle language is employed; and finally there are the writers of short stories and poems, who often employ the local demotic or dialectic forms.

It might not be difficult to collect abundant literary testimony concerning the

[^11]wide difference between the higher variety of the written language and the dialects which the people spoke. For instance, the learned Michael Akominatos, who became archbishop of Athens about 1175 A . D., complains that the inhabitants of this once famous city could not understand him. But a chain of such testimony would be superfluous, for we have sufficient extant specimens of the demotic beginning with the eleventh century, and can, by actual observation, note the difference between the spoken dialects and the scholarly language. It is impossible here to name even the most noteworthy of these specimens. Only two or three of the most ancient will be mentioned.

As early as the end of the tenth century there grew up a number of legendary songs which celebrated the deeds of a hero called Digenes Akritas, a chivalrous Byzantine warrior and adventurer of the type of the French Roland or the Spanish Cid. These songs were collected and patched together by schoolmen in such a way as to constitute a continuous epic narrative. At least four such aggregations are known to exist. Although the original language of these songs has been modified by the scholars or rhapsodists who welded them together into these four kindred epic tales, yet they are a precious document for the history of the popular language. ${ }^{1}$

One of the primitive writers in modern demotic, whose works and whose name have been preserved, was Theodor Prodromos. On account of the poverty, with which he was afficted for his entire life, he called himself "Needy Prodromos" or "Ptochoprodromos," and under this name is he most commonly referred to. Ptochoprodromos wrote in both the classical Kene and in the vulgar demotic, if he be the author of all the works that have been attributed to him. The writings in classic Kœne that go under his name are composed in good style conformably to the spirit of the Komnenian renaissance, and in a language much resembling that of Loukian. His writings in demotic are chiefly four petitions in verse-in the first of which he beseeches from the Emperor Ioannes Komnenos ${ }^{2}$ assistance and relief from his poverty; in the second poem he asks for this same favor from a sebastokrator who probably was the second son of the Emperor Ioannes, and in the third and fourth poems he directs his prayers to the Emperor Manouel Komnenos. In these beggar poems the language of the prologue and of the closing verses of each poem is a miserable variety of the old Kœene, but in the body of the petitions the demotic is used. ${ }^{3}$
At about this same time there was written in the demotic language a poem known to us under the title of "Spaneas." It has been preserved in several widely divergent versions. Perhaps the oldest version and the one nearest to the original poem is that published by Legrand. ${ }^{4}$ It is an inattractive didactic poem. The original poem was written about the middle of the twelfth century. ${ }^{5}$

Another linguistic monument from this same period is the poem which Nichael Glykas wrote while in prison, intending it as a petition to the Emperor, Manuel Komnenos, explaining the injustice of his imprisonment and asking for release. It must have been written about the year 1158 or $1159 .{ }^{6}$

These, then, are the sources whence it is possible to learn the nature of the demotic language in the twelfth century, when it nirst appeared in its modern form in literature. It is quite evident that this demotic actually existed long before it appeared in literature. Ptochoprodromos, Glykas, and the authors of the other works mentioned wrote in a language quite near to the actually spoken dialect of the uneducated of their day in Constantinopol. They approached much closer to the actual language of the people than Malalas and Theophanes and Porphyrogennetos had done.
The successive misfortunes of the Byzantine Empire and the final occupancy of the throne of Constantinopol by the Moslem conqueror in 1453 severed many of the

[^12]traditional ties that artificially held the Greeks together as one people. Then it was that genuine and pure demotic in dialectic form might be expected to acquire full license to enter the precinct of literature-no longer as an inferior tongue, but as the compeer of the ancient and aristocratic language of the capital. This real and dialectic demotic of the modern Greeks appeared when writers no longer thought of making their works presentable to the Byzantine Empire in its entirety and to its scholars, but merely to their fellow-townsmen, whose acquaintance with language was limited more or less to the diaiect of their own village. This dialectic or provincial demotic first rose into literary prominence in countries which for ages had been but loosely connected with the Byzantine Empire, and which had come under the influence of Western rather than Byzantine culture, in the Ionian Islands namely, and in Krete and Kypros and Rhodos. Writers in these provinces could view the language question with less rigid preconceptions in faror of tradition, and at the same time were less influenced by a broader patriotism which inight impel them to neglect local dialect for the sake of the more general good.

Not all of the dialects can be commented on here. It was in the Kretan dialect that the richest and best known literature appeared. Perhaps the most famous composition in this Kretan dialect is the long epic poem called Erotokritos. It was written by Vincenzo Cornaro about the middle of the sixteenth century. Of all the works in modern Greek literature, the Erotokritos has been the most popular, especially in the islands that were under Tenetian dominion. Koraes calls it "The Homer of modern demotic literature." The plot of the poen shows the influence of Western manners and customs. Erotokritos secretly loves the Princess Aretousa. But her father, the King of Athens, wishes to give her to some royal personage who would be worthy of succeeding him on the throne. Erotokritos is a comely youth, a sweet serenader, and a victorious combatant in the toumament which the King institutes. But when his love becomes known he is exiled from Athens. After this, the King of the Vlachs invades the Kingdom of Athens, but is driven off by the bravery of Erotokritos. By this good fortune he becomes the King's farorite, and is accepted by Aretousa, who had loved him all along.

The first who attempted to reduce the demotic language to grammatical system was Nikolaos Sophianos of Kerkyra. ${ }^{1}$ He was one of those educated Greeks who uniter in themselves the learning of western Europe with a thorough knowledge of the language of their country and an intense love for their fellow-countrymen. He was one of the alumni that had studied under Janos Laskaris in the noted Greek school which Leo the Tenth founded in Rome." Sophianos held the demotic language in high esteem, and was in favor of taking as much as possible from the demotic into the literary language. In the preface to his grammar he announced his intention of publishing, in this dialect, other elementary books such as treatises on rhetoric, logic, geometry, astronomy, and philosophy, and a neo-Hellenic lexicon, and translations from the classical authors, to be employed in the elevating of the status of education among the young Greeks. But the only work which he actually published in this language was a translation of Ploutarch's Treatise on Education. This was printed in the year 1544. Even his grammar remained unpublished. In 1870 MI. Legrand published the first part of it from a manuscript which had been preserved in the library of Paris.

From the beginning of the sixteenth century down to the beginning of the nineteenth there were three phases of language struggling silently for the future mastery in literature, the old Kœone, the demotic in the form of local dialects chiefly, and a mixed rariety which accepted very much from the demotic and discarded very much that was peculiar to the old language, as, for instance, the use of infinitives and optatives and datives, but which, nevertheless, retained in general the ancient grammat-

[^13]ical types. This middle phase, this language of compromise, which seemed capable of partaking of the best qualities of both the others, was destined to be regarded as winner in the new kingdom of Greece.

This middle language was not an entirely artificial mixture. It grew up in Constantinopol chiefly amongst those whose official life kept them using the language of the church. The higher classes in Constantinopol had retained much more of the old language than did the Greeks in general. The celebrated Italian humanist, Francesco Filelfo, who had lived in Constantinopol from 1420 to 1427, and who was a thorough Greek scholar, while stating that the language of the multitude was very different from the ancient, praises the purity and accuracy of the language of the higher classes, especially that of the ladies of Constantinopol. ${ }^{1}$ From Constantinopol this mixed language was propagated through other parts of the Greek world. It became the language of the pulpit and the monasteries and the schools. Miuch of the literature appeared in it, but of the more inferior kind, however, for the best scholars, like Gennadios and Bessarion and Gemistos, adhered to the ancient.

There is no reason for viewing this mixed language as being much different from a dialect. In its ordinary acceptation a dialect is a special form of language spoken by a set of inhabitants who live together and form a community as regards site; this mixed tongue was the language of a body of men who, though not living together as one community, yet were in continual communication and were a separate set of inhabitants who by unconscious mutaal infuence and example taught each other to use this mixed language. And as the class of men who used it were kept in union and intercommunication mostly by the medium of the church, it inight appropriately bo distinguished from the dialects of local origin as well as from the higher variety of church language by being described as the "vulgar ecclesiastical dialect." It is therefore quite probable that this mixed language was not willfully and scholastically created out of the inventive imagination of the first writers who used it, but that it was quite similar to the language then employed in social intercourse among all Greeks of any learning except the extreme ones who sought their ideal either in the classic Kone or in the local dialects.

Of all those who made use of this mixed language, the monk Elias Meniates deserves special mention here, because he was one of the most famous and popular Greek preachers of modern times. ${ }^{2}$ The sermons which he preached to the Greek community of Venice, and to the inhabitants of his native island of Kephallenia, and to the Peloponnesians in the diocese of Kernike and Kalabryta, where he was made bishop in the year 1711, used to attract multitudes of hearers. Not the slightest reason exists for us to suspect that his language was not intelligible to the crowds that used to go to hear him.

It was peculiar to those who used the mixed language that they could draw on the traditional Kœne whenever the speech of the people did not supply such words as they wished, and that they used ancient rather than popular types of words, when this did not render their language too different from such as the people understood. It is immediately evident that there existed almost as many grades of this mixed language as there existed speakers and writers who employed it.

From the middle of the eighteenth century a strong feeling of patriotic fraternity was propagated among the Greeks. They were made to feel that they were a single and united people, whose independence was approaching. This idea of racial, religious, and political unity could not but make itself felt in the natter of language. Scholars became convinced that some one of the three phases of language should be definitely and finally selected as the sole official language of the entire Greek world. Each of the three rivals had earnest and intelligent advocates.

[^14]Toward the beginning of the present century the claims of the ancient Greek, or at least of such Greek as is found in the New Testament and the Church Fathers, were supported by men of high and wide repute at that time, such as Lampros Photiades, who taught in Bucharest; Stephanos Kommetas, of Thessaly, and Neophytos Doukas, of Epeiros. Kommetas entered the field of argument in favor of the classical tongue by publishing in Vienna in the year 1800 a "Practical grammar"
 to this grammar he first explains his grounds for thinking that the old Greek is the only proper language for the Hellenes, and then he adds that the classical language may easily become familiar to all Greeks who determine to learn how to use it. A more powerful defender of the ancient Greek was the noble-souled Doukas. He first proclaimed his views in a grammar called "Terpsithea," which he published in Vienna in 1804. He did not adrocate a complete return to classic and Attic Greek, buit a return to a pure Greek language merely, which would be much like the best language of the Patriarchate of Constantinopol. To this sect adhered the celebrated Phanariote community of Constantinopol. The Phanariotes were that community of influential Greeks of loose conscience who lived round the palace of the Patriarch and molded and directed the policy of the church. Most of the educated churchmen throughout all parts of the Greek world were in favor of the traditional literary language, which had been glorified by being the medium of philosophy and Christianity, and by being the language of the Patriarchate and the former empire. In this spirit the two great lights of the Hellenic world in the eighteenth century, Evgenios Boulgaris and Nikephoros Theotokis, had adhered in most of their writings to the strictly orthodox language. True it is that Boulgaris translated into a mixed language, which he thought to be more intelligible to the people, the noted work of Voltaire on the dissensions of the church in Poland, and published it in 1768. But most of his gigantic literary feats he performed in the old Greek. He expressed his views about the commoner tongue in his "Logic," which he published in 1769, where he attacks and ridicules this language as being an unworthy medium of higher thought. Likewise Theotokis composed usually in the ancient language, but like Boulgaris he made exceptions; for instance, in the year 1796 he published in the mixed tongue, which he wrote with much grace, a book for popular use called "Kyriakodromia," which explains the gospels and lessons read in the churches on Sundays and feasts.

But these churchmen who favored the ancient language had enemies as determined as themselves. Doukas was a teacher in the Greek school which Lampros Photiades harl founded in Bucharest. Some of his opponents, finding that logic as they employed it had no effect on this enthusiastic and untiring writer and defender of the ancient language, determined to resort to more effective means. He was waylaid one morning early on his way to church to celebrate the holy mass, was attacked and left for dead. This maltreatment rendered him an invalid for three years. But he finally recorered, and resumed liis task of defending his principles.

The demotic, which in its dialectic forms had long since become popular as a literary medium for special kinds of composition, now acquired a school of admirers who promulgated the doctrine that their demotic possessed virtues of such a character as to justify its adoption as the sole national language. Among the most remembered of these pleaders for the exaltation of the demotic were Katartzes, Billaras, and Christopoulos. These three not only defended the use of the demotic, but took the logical stand of endeavoring to use it in their writings. Demetrios Katartzes, who lived in Roumania, wrote in prose, and his works are now valueless; but the other two, Billaris and Christopoulos, wrote in verse, and have been ranked among the poets of note. Billaras was very successful in satire, and Christopoulos, on account of his easy-flowing erotic and bacchanalian songs, has been called the modern Anacreon. In the year 1814 Billaras published a book ${ }^{1}$ in which he defended his
position regarding the question of language. It seems that in later life he abandoned the more extreme opinions which he defended in this book-such as the introduction of phonetic spelling into modern Greek-but nevertheless he always remained a determined supporter of the demotic as he understood and wrote it. Christopoulos also wrote in behalf of his practice. His views can be found most attractively expressed in a dialogue in which, adopting his plan from Xenophon ${ }^{1}$ and Loukian, ${ }^{2}$ he introduces two supernatural women, one of whom represents the demotic and the other the traditional literary language, who by debating in the presence of Christopoulos on the attractiveness and usefulness of their respective languages endeavor to gain the friendship of Christopoulos accordingly. Christopoulos decides to follow her who advocates the claims of the demotic.

Entirely new life and interest was given to the dispute by the deep scholarship and patriotic labors of Adamantios Koraes. ${ }^{3}$ This savant, who was a native of Chios, studied medicine in Montpellier, and afterwards lived most of his long and busy literary life in Paris. Like the other enlightened Greeks of his day, he felt that a period of national independent existence was approaching for the Greeks, and did all he could to precipitate it and to gain friends for the cause. Especially did he devote himself to the task of improving the condition of education and culture among his fellow-countrymen. With this end in view he wrote and published continually. His writings soon attracted the attention not only of the Greeks but of scholars everywhere. He recognized the importance of the language question. His first public and official utterance in regard to it was in the prolegomena to an edition of the Aethiopika of Heliodoros, which he edited in Paris in the year 180t. His views in detail he published in prefaces to editions of certain other Greek authors. These prefaces are entitled Spontaneous Reflections on Greek Education and Language. ${ }^{4}$ He saw neither in the pure dialects nor in the traditional Kœone of the church and the aristocracy of letters the kind of language that could be adopted for the new nation he was dreaming of. He thought that the language of the people was worthy of being thoroughly studied and sifted, and that whatever of its essence was neither purely modern nor foreign should be adopted as the nucleus for a new variety of a literary and polite language. It is clear that only as a nucleus could this demotic language serve. For the language employed by the uneducated Greeks was inexact and meager, being sufficiently rich only in the more concrete and ordinary terms which least often occur in higher literature. Koraes wished to keep as close as possible to the demotic. In the selection of words and in the construction of sentences and modes of expression he took pains not to wander off from this demotic, or at least not to depart so far as to make his language unintelligible to the common man. In the process of elevating the language he considered that the first and most important measure was to purify it from all foreign elements, and especially from foreign words, most of which were Italian or Turkish or Albanian. Then he desired that all words and types which differed but very slightly from their ancient forms should be written after the ancient manner. And then he wished that all who wrote in new Greek should write consistently with their own principles; that they should adopt certain forms and adhere to the use of them so that their language might have a symmetrical structure. He looked forward to the time when good poets would arise and follow this method, and by their example set the style of language that all would then adopt.

Koraes' desire was to form a self-consistent language. Those who before him had written in this mixed middle style often took phrases and idioms and words from each language at random, and mixed them into a most bizarre and inartistic

[^15]composition, without rule and without taste. The result was that the language in which they tried to write was not of an even and uniform kind, but the writer kept continually leaping zigzag from one style of language into the opposite. This unscholarly and inartistic style Koraes conțemptuously calls "maccaronic," taking the term from the Italian-for among Italian literary critics "maccaronismo" is used as the name for compositions written in an absurd and ridiculous mixture of Latin and Italian. As distinct from the "mixobarbaric" language of his predecessors, the style of language in which Koraes wrote is known as "the purified tongues," or "katharevousa." This name is now recognized by all as the proper designation for the official language of the modern kingdom of Greece.

Koraes knew and taught that the modern language should not willfully cut itself off from that period of the past in which a great literature had appeared in Greek. Accordingly, the enriching and beautifying and elevating and uniting of the imporerished dialects of the Greek rajas was to take place by drawing on the ancient for every term and mode of expression which the spoken dialects were not ready to supply. In this way the language which Koraes advocaterl, and in which he usually wrote, bore strong resemblance to the ancient, but the likeness was produced in conformity with principles sound and logical. From among the many dialectic forms of declension and inflection he preferred those which were nearest to the ancient ones. Occasionally, when the dialectic forms were quite different from the ancient, he preferred to retain the ancient type. And when new terms had to be introduced from the ancient, such words were chosen as were most conformable to the nature of the modern language and most easy of being apprehended and understood.

Koraeg' fame in connection with the language question depends not so much on any novel principle that he introduced as on his learning and ability, which enabled him to show by the example of his prolific and scholarly pen the feasibility and advisability of the course which he recommended. Naturally, however, he laid himself open to attack. The demoticists did not agree with him because he did not limit himself to their narrowness. But the most merciless attacks came from the ranks of the supporters of the written Kene. Especially did the church and the aristocracy of Constantinopol feel unfriendly toward the man who thus joined hands with the populace, and recognized so much rirtue in this lowly language. These opponents suspected that his doctrine concerning the language question was a result of his sympathy for the spirit of the French revolution. One of the Phanariote community, Jakobos Rizos, who taught Greek literature in Genera and was well known in Eurone, satirized the teachings of Koraes in a severe and personal comedy. ${ }^{1}$

Another scholar who took a prominent part in the discussion was Panagiotes Kolrikas. He was a native of Athens. After having studied in Constantinopol he went to Bucharest, and there became a pupil of Lampros Photiades. Later in life he went to Paris, and there held the position of an interpreter under the government. He wrote in the "maccaronic" or "mixobarbaric" style. In the year 1802 he published a pamphlet attacking the opinion of those who wished to purify the demotic. He seems to have held theoretically that the deficiencies in the demotic should be filled by drawing most freely on the classical and traditional language, but that no attempt should be made to render the two ingredients similar to each other and monochrome. His pamphlet ${ }^{2}$ was severely attacked by Koraes and others, and years afterwards he felt obliged to write another and more exhaustive treatise in self defense and retributory onslaught on his opponents. ${ }^{3}$ Doukas also attacked Koraes, and was rudely attacked in return. But the disputes between these various leaders were often more personal than scholarly, and need not be further commented on here.

[^16]In spite of all opposition, Koraes' teachings, on account of their reasonableness and practicability, began to prevail among the Greeks everywhere. Lampros Photiades, who hitherto had been a warm defender of the archaistic Kœne, after reading Koraes' "Spontaneous Reflections," became strongly inclined in his favor, and, as is recorded in the "Logios Hermes" of Vienna for 1819, stated that of all the Hellenic scholars of the day Koraes was the only one who had clearly shown in what language the Greeks ought to write and speak. The ease with which this mixed language could be written, and the fact that it had been in one form or other the literary medium of many writers for more than a century back, together with the impulse given to its use by the teachings of Koraes, caused it to become the official language of the regenerated nation. The army leaders in the struggle for independence from 1821 to 1828 made considerable use of it. Likewise the national assemblies and the central government accepted it. The press also, ${ }^{1}$ before the declaration of independence had employed this language in the varions Greek journals that had been published in Tienna and Paris, and notably in the Logios Hermes, which was edited in Vienna by supporters of the principles of Koraes; and after the beginning of the war, the Chronicle of Mesolongion, which began in 1824, and most of the subsequent journals, were edited in the "katharevousa."

With the establishment of a system of popular education in 1828, under Kapodistrias the president of the Greek commonwealth, the katharevousa was taken as the medium through which all instruction was to be given in the elementary and middle schools. And since 1837, when the National University was founded in Athens, this likewise has been the language used by all the professors, both in their lectures and in their writings.

But the wholesome doctrine inaugurated by Koraes, that the demotic should always be the soul of the written language gradually was lost sight of. On account of the poverty of the demotic, each writer and speaker had unlimited liberty to introduce from the ancient whatever words he needed. By virtue of this circumstance, every man who purified his language in accordance with the principles of Koraes might by reflection observe that more than nine-tenths of his words and grammatical forms were ancient, either by traditional oral preservation or by adoption and incorporation. In consequence of this proximity of the approved modern language to the ancient classical, many writers were tempted to make their language out-and-out archaic. These may be classed as disciples of Doukas, and his method of writing rather than of Koraes. ${ }^{2}$ A noted defender of this nearer approach to the ancient language was the poet Panagiotes Soutsos. He explained the reasons for his attachment to the ancient style in his prolegomena to his drama "Evthumios Blachabas," and in an essay entitled "A New School of Written Speech." ${ }^{3}$

In this process of enriching the katharevousa from the classic Creek, the greatest difficulty came from the fact that the Greeks had but recently escaped from servitude, and therefore did not possess many efficient scholars who could afford to devote themselves to this labor. Modern civilized life had immediate need for a multitude of words, which during the past two thousand years had been entirely unnecessary, and had therefore long ago become extinct in the spoken language. These forgotten words had to be brought back with all haste and rehabilitated into the daily language of the people. To go to the ancient Attic and other varieties of ancient Greek for a necessary word is merely to go to the nearest and most closely related source.

It is a well known fact that during the many and long ages of its existence the Greek language underwent numerous changes in pronunciation. Some of these

[^17]changes are of such a nature as to render certain few words of the ancient no longer serviceable in the present language, because when profounced by the present method they are liable to be confounded with other words of other meanings. For example, the ancient word for "we" is by modern pronunciation, which makes no distinction between eta and ypsilon, identical in sound with the ancient words for "you." One can easily imagine the inconvenience that might arise from the use of words of such ambiguous meaning. But the danger of confusion is by no means so great as it would be in a noninflected language, for in Greek the verbs indicate the person referred to.

This demand for such an increase of vocabulary, necessitated mostly by the sudden transition from a peasant and pastoral life to one full of all kinds of activity, could in great part be satisfied by renewing the forgotten part of the classical language. But the exigencies of modern life, in many respects different from the ancient, together with the demands of the new sciences, and new inventions, and new modes of dress, and the need of technical terms for modern music and fashion and so on, could be satisfied only by the introduction of a number of words which never existed in the ancient. These new words had either to be borrowed from other modern languages or else had to be created out of the abundant and plastic material afforded by the old Greek. The second course has usually been followed, and thus the homochrome quality of the language has been preserved. There has lately been published a lexicon of more than 60,000 words that have been added to the language since the fall of Constantinopol. ${ }^{1}$ The author gives the date and place of the first appearance of each of these new words in the written language. It must be repeated that these are new-coined words, and are distinct from the equally large number of old words revived for new service with their old meaning. Most of these new-coined words are quite correctly formed from pure Greek originals by composition, and most of them are euphonious and expressive. By these two processes of enrichment it has been found easy to keep abreast of modern progress in language.

On account of the intercourse with other nations, especially in commerce, many names of concrete objects, of wares from abroad, have been imported along with the articles indicated by them. But even these words have in many cases been replaced by others of Greek origin, and foreign names that were in use a generation ago are no longer intelligible save to the older people.

This rapid enrichment of the language could not have taken place faultlessly. There is wide room for criticism and correction in many places. This work of criticism has been taken up by a few philologians, notably by the famous Kontos. Unfortunately Kontos did not keep his scientific work free from raillery against all those who did not recognize and correct the blunders which they and others were from time to time committing. Perhaps no other philologian has such extensive and reliable knowledge of the correct use of Attic words as has Kontos. But his influence has not been as fruitful as it deserves to have been. He himself is not a copious writer in original composition, but has confined himself to oral teaching and to the thankless task of pointing out the faults in the work done by others.

Writers and users of the katharevousa may be designated by the common name of "purists." They are divided into three grades. The austere purists endeavor to employ their words and forms with classic precision. In practice they undertake to observe what such philologians as Kontos teach in theory. The men of this school are mostly writers of prose. In fact, they can now boast of only one good poet, Kleon Rangabes, who in this high style of language has composed a number of short lyric poems, which he has published in a volume called "Sorrows." ${ }^{2}$ But even for Rangabes this extremely high and correct language is acceptable only in his medita-

[^18]tive and dreamy lyrics. In dramatic composition, such as his "Theodora and "Herakleitos," he adopts rather the language of the middle class of purists.

In the middle or temperate katharevousa is housed the great mass of the better contemporary literature of Greece. The temperate katharevousa is used by all public speakers, by the members of Parliament, and by all scientific men. Some readable poetry and a great quantity of excellent prose have taken form in this middle katharevousa. Among the poets it has been used by Alexandros Soutsos, Panagiotes Soutsos, Paparregopoulos, Achilles Paraschos, not to mention others. It is the language usually preferred by those who translate light literature from European languages into Greek. It has also been used by Roides in his notorious novel the Popess Joanna.

Finally, there is the style of language which, for instance, Bikelas used in his translation of Shakespeare's plays into Greek. Case endings of nouns and personal endings of verbs are often taken from the demotic. Likewise many words which by being of foreign or of supposedly ignoble origin are excluded from more rigorously pure composition are allowed in this grade of katharevousa. It is dificult to decide whether such writers as Damberges and Drosines should be classed here or with the demoticists. They are writers of short stories and poems. Their language is indeed based on the katharevousa, but is nevertheless much influenced by contributions from the demotic. The fact that they describe the life and thoughts of the country people and shepherds explains in a great measure their tendency toward the demotic.

The katharevousa has received some severe criticism from European scholars. But, on the other hand, it has been highly lauded. Whoever wishes to form a notion of its merits and defects has to study it directly and judge for himself. The outsider is prone to suspect that its similarity to the classical language is too artificial. He may even go so far as to feel innocent when he condemns it without knowing it. Among the Greeks themselves many of the best writers and most intelligent critics do not like to see it incline excessively toward the principles taught by the school of Kontos. Possibly the best judge in the matter is Chatzidakis. He deprecates the unrestrained tendency to classicism. But, nevertheless, he judges that historic reasons imperatively make it impossible for Greece of to-day to thrive intellectually and politically on any other language than the katharevousa. Chatzidakis is a glossologist; and in this connection it is interesting to note that those outsiders who have attacked the katharevousa have held that they based their dislike for it on glossological reasons. The glossologist, as such, has hitherto had no respect for literature, and has taken no account of the demands that literature and history may make on a language. These demands lie beyond the present limits of glossological study. The katharevousa, like every literary language, interferes with the free action of phonetic laws and other influences that operate more rapidly and effectually on speech when literature does not exist. To the glossologist modern Greek might offer a more interesting study if it might only go on untrammeled and unhampered by literature. But what might be best for glossological science might be fatal for the Greek nation and its literature and its hopes.

There has in these later days been a rebound from the use of the katharevousa. Perhaps the excessive purists are in some degree responsible for this reaction. All fine-souled people seem to love dialects, and do not care to see them abused. But in Greece the lovers of the lower forms of language go much further. For here there is a small school of men who advocate the use of the dialectic and demotic tongue as the exclusive literary medium. But a good number of these demoticists are men who imagine that they could be celebrated authors, especially poets, if they did not have to spend long years in study in order to master the language in which they would write. Poetic and literary talent they believe that they possess innate. Indeed, the notion that men of other nationalities acquire accurate and ready knowledge of their native language by simply growing up is very common in Greece. And even the
eminent Chatzidakis believes that in the time of the ancient classic splendor no writer would have to think a moment about how he ought to clothe his ideas in words, once he became master of the ideas. ${ }^{1}$
Besides the quasi poets and the story-tellers who sigh for the reign of demotic, and who not knowing demotic create one to their fancy by remodeling the katharevousa according to their a priori notions about dialect and demotic, there are serious men who think that a language formed by gathering up everything that can be found in the dialects should become the official language of literature. The most widely known of these is Professor Psycharis, of Paris, who has written some most interesting books in what he declares to be the common spoken language of Greece. He gathers his words and phrases from the dialects. He has a warm supporter in Prof. Émile Legrand, who has done much for the promotion of interest in the study of Byzantine and modern Greek literature. M. Legrand, like Psycharis, abuses all who do not adopt his riews about the "deadness" of the katharevousa and the excellence of the dialectic speech. Around Psycharis and Legrand may be grouped most of the others who write in demotic. Legrand has gathered together the names of the most prominent of them, adding short biographies and specimens of their writings, in a chrestomathy of New Greek, which he published for the use of his pupils in Paris (Chrestomathie Grecque, publiée par Emile Legrand, professeur de grec moderne à l'école nationale des langues orientales vivantes, et Herbert Pernot, répétiteur de grec moderne ì l'école nationale des langues orientales vivantes. Paris, 1899). Many of these dialect writers produce most charming short sketches. From the folklore of the people, which is rich in picturesque expressions and in the more gaudy trinkets of story and simpler poetry, the demoticists gather together many choice phrases. In this same folklore they find also interesting material for their stories and poems. The attractiveness of this material aids their plea for the dialectic language, as if the nature of this folklore were due to the language in which it has been preserved. But the demoticists can not be easily criticised on the question of their language, for outside of the circle of their admirers there are but few who are able to speak well or write in demotic. Among those who prefer the demotic are the poets Palamas and Markoras. Among the novelists Andreas Karkabitsas ranks high. Of course the demoticists can not well agree on any standard variety of their favorite language. Polylas translated the Odyssey into demotic, and Palles has translated the Iliad. Whoever compares the language of these two translations may observe how greatly Polylas and Palles fail to coincide in their choice of idiom. The great pride and boast of the demoticists is the lyric poet Solomos, of Zakynthos, who, at the outbreak of the revolution, wrote his celebrated "Ode to Liberty." But, like most other demoticists, his language is not the pure dialect of his native island; he borrows freely from the katharevousa. Moreover, his poetry owes its fame chiefly to the stirring themes which he selected rather than to the language.
Dialects still flourish in the remote parts of Greece among the uneducated. The influence of the schools does not reach the children of all the inhabitants as it should. Most all the other efficient means for the propagating of language are now opérating very imperfectly. There are no reading circles, and no literary societies, except in the large cities. The people have no books. There are no family libraries in the private houses, and in the provinces there are very few public libraries. There are no halls and no places where the people hear lectures or speeches, or enjoy any kind of literary entertainment. There is almost no preaching in church. Imagine what the condition of the language of the English or American peasant

[^19]would be under similar conditions. Fortunately, these evils are merely remains of past modes of life and will pass away.

As for the written katharevousa, which is probably destined to continue to be the only serious literary and universal language of Greece, we can not form a just notion. It is hard to judge of the excellence of a language. One is liable to be influencerl by the merits of the corresponding literature. Yet it seems that an excellent language may have a very indifferent literature, and a poor language may possess an excellent literature. It may be noted that to-day the written and not the spoken word prevails among civilized peoples. Therefore the relations between the demotic and the literary languages are not the same as they were when all men spoke indeed, while but few used to read and write. Many of us now think it proper to try to talk in a language conformable to written models rather than to write in a language modeled after our daily speech. It is possible that to-day the spoken language must make more concessions to the written than the written to the spoken. If so, the principles of the purists are most logical.

There is a feeling among many in Greece that the late tendency toward the so-called demotic, toward the artificial mixture made up for the occasion by each long-haired poet who begins to write verses, is a sign of the decay of the historic national consciousness and a bad omen for the future. The suspicion that these tendencies are antinational has assisted in occasioning the formation, just lately, of a new organization called the Society for the Defense of Ancestral Institutions. ${ }^{1}$ The nearest purpose of this society is to reawaken a spirit of love and reverence for the old orthodox religion, which has gradually fallen into a most sad plight, and for the ancestral written language, which the society proposes to propagate with patriotic zeal. Their cause is holy. The Philhellene will always be glad to learn that they take a high and noble care of their historic tongue, and that they do not intend to let it wither itself out into a few interesting glossematic dialects.

# GHAPTER XXIV. 

## THE LEGISLATIVE CAREER OF JUSTIN S. MORRILI.

An address delivered at New Haven, Conn., November 14, 1900, at the request of the executive committee of the American Association of Agricultural Colleges and Experiment Stations, by George W. Atherton, LL. D., president of the Pennsylvania State College.

The career of Justin S. Morrill is a conspicuous and brilliant illustration of the training power of free institutions.

He belonged to the "plain people." He was the son and grandson of a village blacksmith. At his death there were gathered to do him honor the President of the United States and his Cabinet, the Supreme Court of the United States, the General of the Army and his staff, the diplomatic representatives of foreign countries, Senators, Representatives, officials of every grade, and men and women of every station in life. And the gathering was not a perfunctory meeting of routine and formal officialism. It was a great assembly of those who had known and loved and honored the man, and to very many of whom his death brought a deep sense of personal bereavement. The flowers that covered his bier were the offerings of unaffected love. The tears that were shed fell warm from the heart.

The causes of this wide contrast between the lowly beginning and the stately ending this sketch will try to show.

Justin Smith Morrill was born in Strafford, Vt., April 14, 1810. He was the eldest in a family of ten children, and was early inured to habits of industry and thrift. His grandfather, in 1795, was among the hardy and aggressive settlers who followed close in the wake of that earlier generation of pioneers who wrested the little State of Vermont from between the conflicting claims of New York on the one side and New Hampshire on the other. These pioneers, occupants of a nondescript territoryneither colony, province, State nor nation-had imbibed the spirit of the thirteen colonies, and had borne their full share in the perils and triumphs of the Revolution, declaring themselves, January 16, 1777, a free and independent State. They had no representation in the convention of 1787 that framed the Constitution of the United States, but afterwards adopted it and were admitted into the Union in 1791, being the first addition to the original thirteen States under the new Constitution.
The grandfather (Smith Morrill), with his wife, five sons, and two daughters, joined in the new movement of population that had been stimulated by the admission of Vermont, and moved from Massachusetts into the northeastern section of the State, settling in what is now known as Orange County. The five sons settled in Strafford, a part of them in what was known as the Upper Village, and the rest in the Lower Village, Nathaniel, the father of Justin S., being among the former. One note of the thriit and sagacity of this family group is found in the fact that, besides carrying on the ordinary trade of blacksmithing with its one man, hammer, forge, and anvil, they made use of a swift mountain stream that ran through the two villages, to drive in each a trip-hammer, and thus established in that rural community one of the beginnings of iron manufacture in this country, turning out for the use of farmers in the vicinity such rude implements as the simple needs of the time required.

Justin S. lived.in his father's home the ordinary life of a country boy, with such sparse privileges as country boys then had, picking up what fragments of knowledge he could in the district school. This was supplemented by two terms at Thetford Academy, one of those institutions which did so much during the first half of the present century to deepen the foundations of a solid education, and a few of which seem to have tasted the fountain of immortal youth. His school edtication ended when he was fourteen years of age. His services were needed to help support the growing family, and he was hired out to work in a store in the village, at a salary of $\$ 30$ for the first year and $\$ 40$ for the second. On the completion of the contract, he engaged in a similar service in Portland, Me., where he remained four years. At the end of that time his former employer in his native village (Judge Harris) made him a partner, Judge Harris furnishing the capital and young Morrill managing the business. After about fifteen years of active and successful business, he was able to retire with a molest but sufficient fortune, purchased a tract of land abutting on the village street, cultivated and improved it as a farm, erected a house, married a wife, and settled himself, to all appearances, as a quiet, unostentatious, retired business man, who could afforl to spend the remainder of his life in the undisturbed enjoyment of such simple and wholesome pursuits and pleasures as his fancy might select.

His career seemed thus to be practically completed. He had succeeded at an early age in reaching a position which most men expect to reach, if at all, at the end of a much longer and severer period of toil. We do not find that his success awakened the slightest trace of envy in any mind. His courtesy in dealing with customers, his absolute and unvarying integrity, his gentle helpfulness toward the lowiy and the less fortunate, his genial sunniness of temper, his watchful and intelligent study of the needs of the community and his foresight in anticipating them had won for him a unique place among his neighbors; so that, while he was little known beyond the borders of his own county, he there easily took first rank among the most respected and honored citizens.

What seemed the close of a career was only its beginning. He had not yet erected a monument; he had simply laid the foundation, broad and deep and secure, as a pedestal on which the finished statue of his career was to stand. In 1854, the representive from his Congressional district declined a reelection, and Mr. Morrill was brought forward as a candidate by his neighbors of Orange County. He was, as I have said, practically unknown to the district. His immediate predecessors had been among the ablest and most eminent public men of a State whose annals are crowded with great names, one of them being that of Jacob Collamer, who afterwards represented Vermont in the United States Senate, and who had been selected to stand side by side with Ethan Allen as a representative of Termont, in Statuary Hall at Washington. It is not surprising that other counties of the district should have looked with some distrust upon this new man, and that a bolting candidate in his own party should draw off a considerable number of rotee ( 2,473 ). This, at a time when political parties were somewhat more evenly divided in Vermont than in recent years, proved to be a serious matter, and Mr. Morrill was elected by a majority of only 59 votes. It is startling to think what momentous possibilities were carried by those 59 rotes. The laws of Vermont then requiced a majority of all votes cast to elect, and a change of only 30 votes out of 16,701 in a rural Congressional district, removed almost outside of the great currents of public life and opinion, might not only have changed forever the career of a single man, but, as we now see, would have checked or turned aside a great stream of constructive influences, the importance and efficiency of which it is altogether impossible to compute. I am not of those who would attach too great importance to the influence of single minds. There is a half truth in the saying of Emerson to the effect that the history of the world resolves itself into the biographies of a few strong characters; but that is largely, as

I think, because such characters represent and interpret rather than create the periods in which they live. The greater truth is that expressed by Tennyson:

Yet I doubt not through the ages one increasing purpose runs, And the thoughts of men are widened with the process of the suns.
The great streams of human destiny flow on, not ordered by a blind fate, but by that great constructive Intelligence which rules from everlasting to everlasting. In one view, a man or a race seems but of slight account in the midst of these irresistible, all-compelling cosmic forces. But, on the other hand, they often color the stream or change its direction, and while each group or race must be swent on by forces mightier than itself, it is also true that each is so organized within itself that its final contribution to the sum total of human progress is largely summed up and expressed in some one generation or individual. As Lowell says:

> All thoughts that move the world begin
> Deep down within the primitive soul, And from the many slowly upward win To one who grasps the whole.

That " one" may be a Julius Cæsar, or a Charlemagne, or a Frederick the Great, or a Hildebrand, or a Savonarola, or a Luther, or a Cromwell, or a Washington, or a Lincoln. Every such man is the embodiment and representative of the life of his era, and the loss or misplacement of that one may involve, therefore, the loss or misplacement of a whole historical epoch. Mr. Morrill, in his measure, was such a man.

In December, 1855, he began what proved to be the longest and, as I am inclined to believe, one of the most fruitful legislative careers thus far recorded in our Congressional history. Certain it is that most of the important legislation of Congress during his long service felt the impress of Mr. Morrill's mind, and much of it took its final form under the influence of his judgment. The bolting candidate of 1854 never reappeared and had no successor. Mr. Morrill was sent to the House for a period of twelve successive years, with majorities ranging from 6,573 to 9,337 , and then, in 1867, transferred to the Senate, where he served continuously thirty-two years, making an unbroken record of forty-four years, on the shining rolls of which there is no mar or stain. I venture to say that no man ever approached him, or, after looking into that noble face, thought him approachable with a proposal to do an act that was not scrupulously honorable. During the course of this long career Mr. Morrill is said to have made not less than one hundred set speeches, and, according to a statement which Dr. True, of the Office of Experiment Stations, was kind enough to have prepared for me, his name appears in the record of proceedings no fewer than 2,477 times as introducing bills, petitions, and resolutions, making remarks or speeches on pending questions, and intervening with suggestions or motions for the orderly conduct of business. He early showed a remarkable aptitude for the details of parliamentary procedure, and was soon recognized as peculiarly fitted to report important measures and take charge of them on the floor of the House. The clearness and simplicity of his expositions, his remarkable grasp of details, as well as of broad, general principles, and his unfailing courtesy toward opponents, coupled with unyielding firmness in maintaining the rights of himself or his committee, made him remarkably successful in guiding a piece of projected legislation through the confused tangle of a rumning debate. Although he spoke so frequently, he is seldom, if ever, found repeating himself, and the range of subjects to which he gave intelligent attention, and to the discussion of which he contributed either opinions or facts, fills one with constant surprise. The wonder is, how any man could speak so frequently in the course of running debates, and on so wide a range of topics, without dropping into the merest commonplace.

In the second session of the Thirty-seventh Congress, for instance, in which he introduced his second land-grant bill, he is recorded as having made remarks on the
appointment of collectors of the income tax, on the payment of bounty to soldiers, on tea and sugar duties, on the direct tax, on the Post-Office appropriation bill, on the diplomatic bill, the homestead bill, the fortification bill, the Treasury note bill, and the tariff bill, on the Illinois Ship Canal, the financial policy of the Government, the naval appropriation bill, the claims for losses by the rebellion, on printing the Patent Office Report, on confiscation, on the volunteers' bounty bill, on a case of alleged drunkenness in the Army, on the Pacific Railroad bill, the Army deficiency bill, the tax bill, the Army appropriation bill, the newspaper-postage bill, the legislative bill, the civil bill, and on the donation of land for a navy-yard. In addition to this he made a set speech in opposition to the Treasury note bill, and presented amendments to the antipolygamy bill, which he was the first to introduce into Congress.
There could be no more striking evidence of the breadth and versatility and accuracy of his knowledge, as well as the steadiness and alertness of his mental processes. His mind seemed to work with the regularity and ease of a finely organized machine, the motive power of which was a well-considered and tenacious purpose. He gave to his duties the same clear and placid intelligence, the same alertness of mind, the same absolute integrity, the same consideration for the opinions and prejudices of others, the same knowledge of the deeper forces of human nature, and the same high ideals that had shaped his earlier career; and all these qualities were enlarged and illumined in the light of a wider range of vision which his higher position gave. In the committee room, on the floor of either House, in his intercourse with his fellow-members, in his relations to the great Departments of the Government, in his constant cultivation of the gentle amenities of social and friendly intercourse, he knew but one thing-to obey the dictates of his own crystal conscience and to serve his fellow-men. Horace foresaw him: "Integer vitae, scelerisque purus." He was one of those finely balanced characters that almost elude analysis. His excellences were so uniformly diffused through the whole man that no one seemed especially to predominate. He was equally the philosopher and the man of action. Holding his own deep religious convictions with quiet but unwavering firmness, he had no word or thought of uncharitableness for those who held other views. A strong and uncompromising party man on general principles, he did not hesitate to speak and vote against his party when he believed it to be in the wrong. Mere majorities had no meaning for him, except as they accorded with his own convictions of truth and duty. Without a trace of asceticism, he always gave the impression of one who walked by an inner light and drew the inspiration of his life from unseen and immortal springs. He was a man among men; in the world, but not of it.

Aside from the comparatively fleeting memory of his fine personality, his permanent fame will be identified with three great measures, or groups of measures, either one of which would have been sufficient to give him a lasting place among the constructive statesmen of the Republic. These measures are:

1. The tariff law of 1861, with its later modifications, and the complementary system of internal revenue.
2. Measures for the construction or modification of public buildings.
3. The land-grant act of 1862 for educational purposes, and the later supplementary legislation.
No account of the tariff act of 1861 would be adequate without a general review of the financial and industrial condition of the country during the previous twelve or fifteen years, as affected by the tariff acts of 1846 and 1857, the discoveries of gold in California and Australia, the movement of population that immediately set in toward the gold fields, the filling up of the West, partly occasioning and partly occasioned by the Kansas-Nebraska legislation of 1854 and subsequently, and the great financial crash of 1857 , following which the credit of the United States was so low that the Government was compelled to sell a 6 per cent gold bond at $89 \frac{1}{10}$ cents on the dollar.

It should be added, however, that this great depression of credit was partly occasioned by the political disturbances preceding and following the Presidential election of 1860, since the permanent debt of the United States (at that time $\$ 45,000,000$, bearing 5 per cent interest) stood at a prenium of 3 per cent in the market.

Mr. Morrill's first tariff measure had for its object to strengthen the credit of the Government, to provide for the payment of a floating debt in the form of outstanding Treasury notes, and to raise the amount of revenue required for the ordinary needs of the Government and for the payment of interest on its bonded debt. The emergency was so pressing and so generally recognized that the measure passed both Houses and was signed by President Buchanan only two days before the close of his Administration. * * *

His connection with the adornment of the national capital with great and worthy public buildings is no less direct, and, in some ways, quite as important as with those things which have just been mentioned. He was a prime mover in the completion of the Washington Monument, after more than a quarter of a century of neglect; in the erection of the stately and commodious buildings in which are housed the State, Navy, and War Departments; in the practical reconstruction of the Capitol Building by a system of marble terracing which has restored the west front to something like artistic proportions; ${ }^{1}$ in having the old Hall of the House of Representatives set apart as a Statuary Hall, in which are gradually gathering, as the choice of the several States may dictate, the bronze and marble forms of those who have dared and suffered and achieved for the Republic, and whose silent lips will ever speak to the youth of the land lessons of loyalty and courage and patriotism and faith and hope; but above and beyond all these, worthy as they were and are, must be ranked his precious contribution to the land he loved in the erection of a noble and beautiful home for the Congressional Library. It is a strange thing that a man born and reared amid the simplest surroundings, who had probably never seen an important work of art until he had reached the age of middle manhood, should have had so distilled into his soul, by the contemplation of nature and by his silent communion with the best and greatest thought of the world as embalmed in the noblest literature, that fine artistic sense which led him to idealize the Republic, and then to strive to have that ideal realized in enduring architecture. To his thinking, nothing was too good, or noble, or refined, or beautiful to represent the best impulses and aspirations of that great democracy whose heart he knew, whose language he spoke, and in whose future he had an immeasurable faith.

It was a fitting climax to all this that his very last speech in the Senate should have been a plea for the erection, on the square facing that where the Congressional Library stands, of a building that should be in like manner the home of the Supreme Court of the United States, and in keeping with the serene and lofty part which that matchless institution plays the balance wheel of our great political system.

But great and far-reaching as were the measures already named, it seems certain from our present point of view that Mr. Morrill's largest fame will forever be identified with the measures which he devised and carried to a successful issue, for the establishment and maintenance of a great system of institutions of higher education, to be aided by the United States, organized and controlled by the individual States, and fitted in as an integral part of the whole scheme of public instruction. To a subject which has been discussed so much and from so many points of view, I can hope to contribute very little that is new, and it covers so wide a field, both theoretical and practical, that the present occasion permits only a bare outline of suggestion on the most salient points.

[^20]The law which now stands on the statute books of the United States was approved by Abraham Lincoln on the $2 d$ day of July, 1862. That act of the President was the culmination of a struggle which had been actively maintained by Mr. Morrill for nearly five years. He introduced his first bill in the House of Representatives on the 14th of December, 1857, just at the beginning of his second term in Congress. The bill was held under consideration by the committee for a period of four months, and on the 15th of April, 1858, was reported to the House with an unfavorable recommendation, accompanied with majority and minority reports setting forth the respective grounds of opposition and of support. Five days later Mr. Morrill took the floor in support of the bill. His argument was based upon the broadest grounds of public policy, maintaining that the public lands, being a common fund for the benefit of all parts of the country, should be so utilized as to promote the welfare of all sections in due proportion; that Congress had used a portion of the first public lands that came under its control in the Northwest Territory for the promotion of primary and university education, and had repeated similar legislation in favor of every State afterwards admitted to the Union; that this policy was too well established to admit of opposition on constitutional grounds, and that no legislation could more directly advance the interests of the great masses of the people than by providing means for bringing the new discoreries of science to the aid of agriculture and the other industries of life. His speech was earnest. elevated, persuasive, and weighty, and though his views were strongly antagonized at every point, in a House in which he and his party were in the minority, he succeeded at last in securing the passage of the bill (April 20, 1858), by the narrow margin of 105 to 100 votes.

An attempt was made to bring up the bill in the Senate at the beginning of the following session, but the antagonism was so powerful and determined that the measure was held back until the 1 st of February, 1859. An uncompromising opposition to its passage was led by Senators Pugh, of Ohio; Clay, of Alabama; Jefferson Daris, of Mississippi; Rice, of Minnesota, and Mason, of Virginia-an array, at that time, of powerful names. The last-named Senator denounced it as the attempt to inaugurate a new policy, as "one of the most extraordinary engines of mischief" that he could conceive as originating in the Senate, as a "visionary project" unworthy of notice. Clay, of Alabama, characterized it as "one of the most monstrous, iniquitous, and dangerous measures which had ever been submitted to Congress;" as a delusive attempt to do an impracticable, if not an impossible, thing. But his principal opposition was based upon the argument that the bill was a direct violation of the rights of the States and an attempt to secure control of their most important interests through the agency of an educational system. Now, even after this shortinterval of years, his language has a musty flavor of antiquity. Let me quote a single brief passage: "The Federal Government," he said, "is the creature of the States and is dependent upon them for its organization and operation. All its powers are subordinate to the States from whom they are derived. The States are in no wise dependent on the Federal Government for their operation, organization, support, or maintenance. I stand as an ambassador from a sovereign State, no more subject to the control of the Federal Government, except in a few instances provided in the Constitution, than any foreign and independent State. This bill treate the States as agents instead of principals, as creatures instead of creators, and proposes to give them their own property and direct them how to use it"-and much more to the same effect. Senator Davis, of Mississippi, confined his attention almost wholly to the constitutional argument, at the same time declaring that the proposed legislation was unnecessary and could produce no good results. Senator Pugh, of Ohio, expressed the belief that an agricultural college would never be established under this bill. Senator Rice, of Minnesota, said that he "looked upon the success of this measure as bringing a slow, lingering death to Minnesota." Senator Wade, of Ohio, was its principal champion; and, after every expedient of opposition and delay and
denunciation had been exhausted, the bill was finally passed (February 2, 1859), with some amendments, by the narrow margin of 3 votes-the vote standing 25 to 22 . The House promptly concurred in the amendments and the bill was transmitted to President Buchanan, who vetoed it February 16, 1859, on the twofold ground that the Government was too poor to make the proposed donation, and that the bill was unconstitutional.

There is no evidence, so far as I have seen, that the failure of this inrst attempt was to Mr. Morrill a source of discouragement or hesitation. He saw, of course, that it would be useless, even if it were possible, to secure the passage of the bill a second time during President Buchanan's term, and accordingly he made no attempt, so far as I am aware, to introduce it during the following Congress-March 4, 1859, to March 4, 1861-but on December 16, 1861, directly after the assembling of the first regular session of the new Congress, he introduced the bill a second time in the House of Representatives.

In the meantime, great events had been happening. When the first bill was introduced, the country was in a state of profound peace, except that political antagonism had become sharply defined, and thoughtful men everywhere beheld the portents of a coming struggle for political supremacy between the North and the South, though very few looked for physical violence, much less war. When the second bill was introduced, war was in actual progress. The Southern States had passed ordinances of secession, formed a Confederacy with the final assent of an overwhelming majority of the people of the seceding States, taken possession of nearly all United States property within their limits, organized a strong central government, placed armies in the field, and won repeated succcesses in their encounters with the Army of the United States. The South expected, a great part of Europe believed, and many in the North feared that the Confederacy would succeed in establishing its own independence on the ruins of a shattered Union. A special session of Congress, during the summer of 1861, had provided men and money for the maintenance of the Union, and when Congress assembled in regular session in December the minds of men were filled with nothing but the pending struggle and the means of bringing it to a successful issue. It is highly characteristic of the sobriety and patience and tenacity and serenity of Mr. Morrill's intellectual processes that at such a time he should turn aside from the consideration of measures relating to the prosecution of war and calmly perfect his great measure for the promotion of popular education. It was also an act of faith and a prophecy. To his mind there was no doubt about the issue of the struggle; and, even if his confidence in the perpetuity of the Union should finally prove mistaken, he still knew that no measure could more surely repair the ravages of war and safeguard the future than the one which had so much and for so long a time absorbed his thought. It may be inferred, however, from the meager notices in the Congressional Globe that Mr. Morrill found it impracticable, amid so many other matters of urgent and instant necessity, to secure time for the consideration of his bill in the House; for, on the 2 d of May, 1862 (nearly five months later), the same bill was introduced in the Senate by Senator Wade, of Ohio. The opposition to the second bill, in the Senate, was determined but unsuccessful. Senator Lane, of Kansas, declared that the measure would be "ruinous to Kansas," and that a more iniquitous bill had never been introduced in Congress. But after all discussion it finally passed the Senate (June 10) by a vote of 32 to 7. In the meantime (May 29), the House bill had been reported negatively from the Committee on Public Lands, and on June 5 Mr. Morrill had unsuccessfully asked leave to introduce a substitute bill; but the Senate bill, having been transmitted to the House, was taken up (June 17) and passed by a vote of 90 to 25, after several attempts at amendment and delay had been voted down. Otherwise than this, there was not a word of debate on the measure in the House. Mr. Morrill simply remarked that the measure was well understood, having been before Congress
and the country for five years; and he bore himself throughout as one who was sure not only of himself, but of his support by the House.

One of the most striking facts that appears in connection with the discussion of the two bills, in both House and Senate, is that scarcely anyone, except the author of the bill, showed any clear understanding of its real scope and meaning. Many of those who opposed the measure did so on alleged grounds which were plainly contradicted by the language of the bill itself; while those who spoke in support of it confined themselves almost entirely to correcting such misstatements. Nothing could better show how new was the field into which Mr. Morrill was urging Congress to enter than the course of these discussions. It is easy for us, at a distance of forty years and with full knowledge of the revolution that has during that time taken place in the whole spirit and method of higher education, to look back with something of amusement and surprise at the crudeness of opinion then displayed; but it should be borne in mind that both the direction of Congressional legislation proposed by Mr. Morrill and the theory of education involved in his bill were new, not only to Congress, but to the ceuntry at large. There were then in the United States less than half a dozen institutions outside of West Point and Annapolis where young men could obtain advanced instruction in civil engineering, while electrical engineering was absolutely unknown, and mechanical and mining engineering were taught only through a course of practical apprenticeship. The whole field of physics had hardly been touched except on the theoretical side, and such a thing as a physical laboratory did not then, I believe, exist in the United States. With respect to the natural sciences, the case was hardly different. A few eminent names, like Silliman, in chemistry; Dana and Hitchcock, in geology; Gray, in botany, and Agassiz, in zoology had created interest in those particular subjects, but there was not an institution in the country, even those with which these distinguished scholars were connected, in which these subjects were not relegated to a minor and comparatively incidental position. Even Agassiz, when in 1848 he accepted an appointment in Harvard College, took the two chairs of zoology and geology.
Two powerful influences were working for a change. The first was the fact that scientific inquiry was beginning to reveal to the world its marvelous possibilities, and the other was a kind of blind, groping instinct in the popular mind, leading to the conviction that scientific knowledge ought in some way to be made more useful to the daily occupations of life than had previously been thought possible, and that the educational system of the country ought to contribute more directly to that end than it was then doing. Dr. True has published a very interesting account of several early attempts to work out this idea, and Mr. Morrill was in close communication with men who had caught the impulse of it. But neither colleges, nor teachers, nor appliances, nor methods of instruction were ready for this new demand. It is interesting to note that the great measure of relief provided by Congress was devised by a man who had no advantages of collegiate or other higher education, and thus was free from the narrowness and prejudices which such an education sometimes produces; while, on the other hand, he was both by sympathy and by training a man of the people, thinking their thoughts, moved by their emotions, and putting into clear and effective speech what they dimly and vaguely felt.

Aside from the administrative provisions of his bill, the often-quoted words which declared its controlling purpose were practical enough to answer immediate needs, novel enough to open a tempting field of educational activity, and broad enough to cover the widest possible range of future growth. Mr. Morrill once assured me, in answer to an inquiry, that the language was his own, and familiar as it is I may be permitted to quote it here.

After providing for the investment of the proceeds of the sales of the lands, section 4 of the act declares that the money so invested "shall constitute a perpetual fund," that this fund shall remain "forever undiminished," that the interest on this fund
shall be "inviolably appropriated, by each State which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life."

Agriculture was then almost the only great industry of the country, and not unnaturally the Congressional mind and the popular mind caught first at the idea of "agricultural" colleges and "agricultural" education as the subjects chiefly contemplated by the bill; but Senator Morrill himself, on repeated occasions, public and private, stated the true intent and object of the law in language that leaves no room for doubt or question. At one time he said:

It is perhaps needless to say that these colleges were not established or endowed for the sole purpose of teaching agriculture. Their object was to give an opportunity for those engaged in industrial pursuits to obtain some knowledge of the practical sciences related to agriculture and the mechanic arts; such as they could not then obtain at most of our institutions called classical colleges, where the languages, Greek and Latin, French and German, absorbed perhaps two-thirds of all the time of the students while in college.

But it never was intended to force the boys of farmers going into these institutions so to study that they should all come out farmers. It was merely intended to give them an opportunity to do so, and to do so with advantage if they saw fit.

Obviously, not manual but intellectual instruction was the paramount object. It was not provided that agricultural labor in the field should be practically taught any more than the mechanical trade of a carpenter or blacksmith should be taught. Secondly, it was a liberal education that was proposed. Classical studies were not to be excluded, and, therefore, must be included. The act of 1862 proposed a system of broad education by colleges, not limited to a superficial and dwarfed training such as might be had at an industrial school, nor a mere manual training such as might be supplied by a foreman of a workshop or by a foreman of an experimental farm. If any would have only a school with equal scraps of labor and of instruction, or something other than a college, they would not obey the national law. Experience in manual labor, in the handling of tools and implements, is not to be disparaged; in the proper time and place it is most essential, and generally something of this may be obtained either before or after the college term, but should not largely interfere with the precious time required for a definite amount of scientific and literary culture, which all earnest students are apt to find far too limited.

So clear was Mr. Morrill's view on this point that in the title of the bill that he introduced December 15, 1873, he called the institutions "National colleges for the advancement of general scientific and industrial education," and he used to say that the name "agricultural colleges" would never have been applied to the institutions except that it had happened to suit the casual convenience of an index clerk.

At the risk of repeating what is already familiar, permit me to call attention to the cumulative marshaling of thought in the portion of the law just quoted. Each State is required to bind itself to maintain at least one "college," a term at that time applied to a well-known type of institution which provided a four years ${ }^{8}$ course of liberal education in certain well-defined groups of studies. In keeping with this fundamental idea, the new colleges were to make it their "leading object" to teach "branches of learning," and, more specifically, such branches "as are related to agriculture and the mechanic arts." If the language of the law had stopped at that point it would have been sufficient to cover all that has since been done or can in the future be done by the institutions thereby established; for, what branches of learning can be conceived which are not "related" to agriculture and the mechanic arts? Certainly every branch of mathematical, physical, and natural science is directly so related, and there is not another branch of science known to man which is not in turn related to, and in most cases essential to, the mastery of the great fields of experimental science. But if the language of the enactment had
stopped at that point it would have fallen far short of the author's intent, and would have been liable to the misconception of providing only for theoretical instruction in the branches of knowledge named, in the same manner as the then existing colleges were chiefly doing. Accordingly, these "branches of learning" are to be taught in such a manner as to promote a "practical" as well as a liberal education.

It was the emphasis laid upon the practical element in education which gave its distinctive character to Mr. Morrill's plan, and this education, at once "liberal" and "practical," was to be provided for the "industrial classes;" meaning by that, not to suggest a gradation of rank or classes among the great body of the people, but merely to designate all those who were engaged in pursuits other than such as alone were then called professional, viz, law, medicine, and theology. But even this did not fill the measure of Mr. Morrill's thought. He did not aim to restrict the nonprofessional classes (as just defined) to a single field of learning, or to subject them to a single form or type of education. Other scientific studies than those related to agriculture and the mechanic arts were not to be excluded, the ancient classics ivere not to be excluded, and the new colleges were so to cover the whole field of ancient and modern learning as to fit their students for "the several pursuits and professions in life." Mr. Morrill's purpose was, in short, to bring all the resources of modern science into direct relation to modern industries, and to emancipate aspiring and talented youth from the necessity of patronizing only one type of college and entering only one restricted class of professions. This "practical" aim was a definite foreshadowing of what is now known as the laboratory method, which is coming to be everywhere recognized as absolutely indispensable to the best teaching of every branch of science, whether pure or applied, and to the widespread establishment of which the land-grant colleges have powerfully contributed.

It may well be doubted whether the States that accepted the Congressional grant had any well-defined conception of what it meant. On its face, it was merely a contribution toward the establishment of a kind of college of which the need was already widely felt; but it was, in fact and in its consequences, much more than that. Every State accepted the grant on the conditions specified by Congress, and, in doing so, entered into a contract obligation with the United States to make a college a part of its system of public education. I find no evidence that even Mr. Morrill perceived the full significance of this fact; but the movement was in reality, though unconsciously, the most important step yet taken toward the realization of that great idea which Jefferson had conceived and to which he devoted many years of his life-of a school system in every State, beginning with the primary schools and reaching by regular gradations up to a State university, and through the State zniversities to a national universityall to be nonsectarian, scientific in aim and method, and supported by public taxation.

The success of the new institutions was not everywhere equal, nor was it secured in any State without a struggle. They were, in fact, entering a field of education that was practically a terra incognita. They were required to teach the leading branches of experimental science, natural and physical, without proper buildings, equipment, or apparatus, and, above all, without the possibility of obtaining in the United States, at that time, men enough properly trained to fill the newly established chairs. President Gilman, of Johns Hopkins, then a professor in Yale College, pointed out in an article in the North American Review that one of the most serious obstacles to these institutions at the outset would be found in the lack of trained teachers, a lack which happily no longer exists and which the institutions themselves have done much to supply. Another obstacle came from the antagonism of colleges and so-called universities already established; and their antagonism, supported by a powerful body of opinion, forced upon the public mind a consideration of the whole question of the proper function of the government, whether national or State, in respect to the support of higher education. It would probably be too much
to say that the question has yet received a final settlement, but there is abundant evidence furnished by the growth of these institutions and the support given to them by the public that the question is well on the way toward solution, and in the direction outlined by Jefferson and successfully entered upon by Morrill.

Public education at public cost is not maintained for the sake of the individual, but for the sake of the state, the collective whole. If it is true, as Wachington said, that, "in proportion as the institutions of government reflect public opinion, it is essential that that opinion be educated," it is also true that the education must vary in accordance with varying conditions of public life and the changing evolution of public institutions. When the business of government was simple and confined to but few objects, an elementary education may have been sufficient to prepare the masses of men for the intelligent discharge of the duties of citizenshin; but when that business becomes highly complex, as in our own time, and has to deal not only with the greatest national interests, but with matters of world-wide concern, then it becomes indispensable to the welfare of the State that the highest attainable education shall be placed within the reach of every youth who has the ambition, the energy, and the intellectual ability to acquire it. Mr. Morrill and the generation that accepted his plan builded better than they knew; and in their action I see the sure instinct of a great democracy working out the highest law of self-preservation. The opposition to these new institutions was, in fact, based on the same theory and supported by the same arguments as have been used in almost every State against the establishment of common schools at public expense, against county superintendencies, against normal schools and high schools, against central control and against every other proposed scheme for improving them; but the cause of public education, in all its branches, has steadily advanced in spite of every form of opposition, and the public mind has at last fairly grasped the principle that there is no logical stopping place between a public support of elementary education and a public support of the highest university education.
Mr. Morrill never lost his active interest in the welfare of the institutions that had been founded by his instrumentality, and members of this association who"remember his appearance before it at one session of its last convention in Washington will never forget the mingled pride and diffdence with which he expressed his gratification in what these institutions had done and were doing and promised to do, and especially the touching note of personal affection with which he greeted the members as they thronged around him to grasp his hand. He was profoundly and unaffectedly happy in the visible fruits of his accomplished work, far surpassing, as he said, his fondest hopes.
It would be an interesting task, but one requiring more leisure than I have been able to command, to follow out step by step the evidences of his watchful care over their interests after they were once established. During the winter of 1872-73 the present distinguished senior Senator from Massachusetts, then a member of the House, was very earnestly engaged in pushing a measure for the establishment of a permanent educational fund from the proceeds of the sales of the public lands, which should be applied directly to the maintenance of public schools throughout the United States--the distribution to be made partly on the basis of illiteracy and partly on the basis of population. Senator Morrill at the same time had equally at heart the establishment of a permanent educational fund from the same source, the proceeds of which should be applied to the further maintenance of the land-grant colleges of 1862 . The antagonism between these two measures, each proposing for the time being to absorb the entire proceeds of the sale of public lands, was finally reconciled by an agreement between the supporters of each to appropriate one-half of such proceeds to each of the objects named, and the two bills were modified accordingly, a limit of $\$ 50,000$ a year for each State being placed upon the amount of the college income, the com-mon-school fund remaining indefinite. The two bills, as thus modified, had the
active support of a very large majority in each House, but were opposed with great earnestness by some of the ablest Senators then in Congress, and both failed of final passage through the inaction of a committee of conference which had been appointed to reconcile the differences between the two Houses.
In December, 1873, Senator Morrill introduced a bill (prepared by others, but entirely acceptable to himself) which combined the essential features of the two bills just named, but he did not find the conditions favorable for pressing it to a passage. Mr. Hoar in the meantime had reintroduced his bill in the House, and on the 2d day of February, 1874, the House, on the motion of Mr. James Monroe, then a professor in Oberlin College and a member of the House, adopted a resolution instructing the Committee on Education and Labor "to inquire into the condition and management of the agricultural and other colleges which have received grants from the United States under the act of July 3, 1862." Mr. Monroe had been an earnest opponent of the college bill in the previous session and this movement was looked upon by the friends of the colleges as distinctly hostile, or, at best, as intended to delay any legislation in their behalf. The committee prepared and sent to all the colleges a long list of questions, covering every possible phase of their work and history, and many of them impossible of a definite answer, for the reason that they seemed to assume a like condition of things in every State, or, at least, varying conditions that could be reduced to the same statistical standard. It was agreed among the colleges, however, through some correspondence, that all should make the fullest and frankest answers that were possible under the circumstances, and this was finally done by all except two-Kansas and Florida.

On the 13th of January, 1875, Mr. Monroe presented the report of the committee (Report No. 57, Forty-third Congress, second session).
The report avowedly refrains from discussing all questions of general policy involved in the establishment of these institutions, and expresses gratification at the desire shown by most of them not only to furnish the facts sought for, but to aid the committee by suggestions as to the best method of accomplishing its object. It then proceeds to summarize the facts ascertained respecting the sale of lands and land scrip, the investment of the proceeds in the several States, the financial management of the fund, the amount of income from ${ }_{0}$ it, and the educational results. The institutions themselves are described as being "in a state of formation," some States having not yet made provision for the establishment of colleges and others but recently-only six in all having been in operation prior to 1865 . The report concludes, therefore, that it was then " too early to obtain intelligent answers" to the questions asked, and adds that while " there is nothing in the results thus far attained that can be called discouraging * * a considerable number of the colleges have done work which requires no apology, and a few of those earliest organized have already found time to take high rank among the institutions of the land."
"It must be added," continues the report, "that the reports sent from these colleges reveal, in many cases, a certain fresh interest and spirit of youth, a new enthusiasm which, when intelligent and enduring, is one of the best prophecies of success. Strong evidence is afforded of the power of these institutions to establish sympathetic relations between themselves and the communities in which they are placed, in the fact that they have already received in appropriations from States and in donations from towns, counties, and private individuals an amount almost equal, in the aggregate, to the whole bounty of the Government." ${ }^{1}$

It seemed proper to call attention to this report, because it was the first and the last movement in Congress which has ever betrayed the slightest distrust of the work that was being done by these institutions, and it is gratifying to add that Mr. Monroe himself was so convinced by his inquiry that he not only made his report, as we

[^21]have seen, a strong justification of them and their work, but became and remained ever after one of their steadfast friends.

During the two years next succeeding political excitement ran so high, in Congress and out, that Senator Morrill appeared to think it inexpedient to press for any further legislation in behalf of the colleges. He had the subject continually before his mind, made numerous minor modifications of the bill which he had introduced in December, 1873, and there was never a day, I think, when he was not prepared to introduce a bill if there had seemed any prospect of securing time for its consideration. In March, 1877, Senator Sherman having resigned his seat to accept a place in the Cabinet of President Hayes, Senator Morrill succeeded him as chairman of the Finance Committee, and for a time his principal attention was absorbed in that direction. This of itself would probably have prevented him, for the time being, from undertaking further active efforts in behalf of the colleges, but a more controlling reason lay in the fact that Senator Blair, of New Hampshire, who succeeded him as Chairman of the Committee on Education, devoted himself with great earnestness and persistence to an attempt to secure a large appropriation for the support of common schools. It was only after this measure had repeatedly failed of passage that Senator Morrill (with Senator Blair's hearty concurrence) took up again his favorite subject and secured the passage of the act of 1890, as supplementary to his original act of 1862 . This act is of so recent enactment and operation that it is sufficient merely to refer to it in this connection. It was a fitting culmination of Senator Morrill's work for public education. Its helpful and stimulating influence has been felt in every State, and the equal distribution under it has done much to correct the inequalities of the distribution of land scrip under the act of $1862 .{ }^{1}$

Probably Mr. Morrill's last act in this connection was the introduction (March 17, 1898) of a bill providing that whenever the proceeds of the sales of public lands should be less "than is required by the terms of the act aforesaid (the act of 1830) to be paid to each of the several States, any deficiency shall be paid from any money in the Treasury not otherwise appropriated."

Mr. Morrill did not live to see this bill become a law, but a like provision has since been made by act of Congress, and the institutions which Mr. Morrill established in 1862 are now, in 1900, securely grounded on the inviolable faith of the United States. Few men in public life find their own ideals realized or their best purposes embodied in legislation or in permanent institutions, but Senator Morrill, at the close of his career, could look back upon a great body of noble results as enduring as the Republic.

This outline sketch of Senator Morrill's work would be incomplete without a brief statement respecting the growth and the present status of the land-grant colleges. This topic in itself would furnish abundant material for a crowded hour. At present I must confine myself to the bare mention of a few characteristic facts. It should be borne in mind that the act of 1862 did not directly donate the lands to the States, but offered them to the legislative acceptance of the States on certain clearly specified and stringent conditions. The most significant fact, and probably the most unexpected, is the full and liberal response of State and Territorial governments, and, in some cases, communities and individuals, to the initial action of Congress.

The land granted to the States by the act of 1862 amounted to somewhat more than $10,000,000$ acres, which has thus far produced a permanent fund of $\$ 10,262,944$, with lands still unsold of the estimated value of $\$ 4,062,850.30$; the entire proceeds being, in round numbers, somewhat over fourteen and a quarter millions. To this have been added other land-grant funds amounting to $\$ 1,441,577.38$; other permanent funds, $\$ 14,442,194.25$; farms and grounds, $\$ 5,543,108.91$; buildings, $\$ 16,274,000.53$;

[^22]apparatus, $\$ 1,955,859.21$; machinery, $\$ 1,373,696.75$; libraries, $\$ 1,854,942.21$; miscellaneous equipment, $\$ 1,997,690.07$, making a grand total of permanent plant of the value of $\$ 58,944,137.61$. The additions to the permanent endowment and equipment in 1899 amounted to $\$ 2,365,152.43$.
On this basis 64 institutions have been established. In 1899 they had a total of 35,956 students, with professors and instructors aggregating 2,893 persons, and with a total income of $\$ 5,984,037.61$, exclusive of the sums received from the United States for agricultural experiment stations. Of this amount $\$ 624,672.88$ was received as interest on the land grant of 1862 and $\$ 1,120,778.96$ under the act of 1890 , thus leaving to them an income of $\$ 4,248,585.77$, or more than two-thirds of the whole, from other sources than grants of the United States. During the single year 1899, the States and Territories appropriated for the maintenance and improvement of the land-grant colleges no less than $\$ 2,287,917.98$.
These figures furnish most striking and conclusive eridence that the policy of Congress, begun by the act of 1862 and continued by the act of 1890 , has met a great public need, and that instead of encouraging inaction or indifference on the part of the States it has, on the contrary, stimulated them to a degree of activity far in advance of that of Congress. But this array of material strength tells only the lesser part of their story. In the range and quality of their scholarship, in their combination of the practical and experimental with the theoretical, in their adjustment to the conditions of public education in their several States, in their responsiveness to public needs and the best public opinion, they occupy a distinctive position and are doing a work which has profoundly affected the educational life of the country. I confidently believe that, with a charter broad enough to cover the whole range of learning, the future of higher education in this country belongs largely to these colleges and to the influences that they have created and must continue to create.
The accomplished work bespeaks the man. As these institutions typify American education, so Mr. Morrill in his person and character typified an almost ideal American citizenship. He represented more than most men in public life those deep and silent forces that are the real strength of the Republic-nay, they are the Republicthey are its only promise and potency of continued existence. They come from the sober thought of men and women who listen to the inner voices of conscience and duty and obey in their lives the sovereign law of rectitude-the steadfast souls who do the daily work of the world, not with a parade of virtue or an air of martyrdom, but with a cheerful courage and patience and faith because they know no other call than the call of duty; because, as Luther said, they "can do no other." They are the men and women who support churches and schools and charities and cherish the sanctities of home. They are the men of affairs who understand that there is no great or permanent or worthy success in business life except as it is built on a foundation of absolute truthfulness and absolute integrity, and that the standards of public integrity and private integrity are the same. They are the citizens whose judgments remain undisturbed amid the clamorous brawl of self-seeking demagogues and who then turn aside to swell that "silent" vote that often upsets all political calculations. They are the sane and honest masses of the people, who have thus far in our history proved equal to every emergency and risen to the full height of every great crisis.

It was the source at once of Mr. Morrill's strength and of his limitations in some directions that in his own person he stood for and typified so much of these characteristics of "the plain people." He was peculiarly happy in the State he repre-sented-a sober, energetic, thrifty people, loyal to their State, their country, and their God; patrons of schools and colleges and churches; quick to recognize merit in their public men and wise to continue them long in the public service-the best type, in short, of a true American citizenship-and Senator Morrill was simply one among them. He was of them in his origin, in his character, in his training, in his
cast of mind, in his lifelong habits of action; but he was of them at their best, and for that reason his career will for all coming time set a standard which every youth may hopefully strive to reach, but which few will surpass. The institutions that he established will live as long as the Republic lives. They will increase in wealth and influence and public favor, but their most precious possession and their perennial source of power over the young manhood and womanhood of America will be found in the example of the life and character of their founder, Justin S. Morrill.

Appendix.
STATISTICS OF THE UNITED STATES LAND-GRANT COLLEGES, VEAR ENDING JUNE 30, 1899.
[Condensed from statements published by the United States Department of Agriculture.]

| States and Territories. | Value of land grant sold and unsold. | $\begin{gathered} \text { Value of } \\ \text { grounds, build- } \\ \text { ings, and } \\ \text { equipment. } \end{gathered}$ | $\begin{aligned} & \text { State appropri- } \\ & \text { ations ior } \\ & 1898-99 . \end{aligned}$ | Total income 1898-99. |
| :---: | :---: | :---: | :---: | :---: |
| Alabama | \$253, 500.00 | \$303, 875.71 | 86,432.00 | \$43, 682. 50 |
| Arizona |  | 139, 406. 92 | 11,996. 13 | 38, 382.74 |
| Arkansas |  | 319,880.00 | 5,000.00 | 11, 995.45 |
| California | $752,155.65$ | 2, 097, 664.84 | $244,090.64$ | 459, 884.79 |
| Colorado | 218,612.09 | 271, 110.98 | 37,667. 54 | 69, 749.00 |
| Connecticut | 135, 000.00 | 94, 050.00 | 15,000.00 | $55,810.00$ |
| Delaware | 83, 060.00 | 165, 650.00 |  | 31,955. 81 |
| Florida |  | 109, 283. 77 | 4,000.00 | 40,627. 35 |
| Georgia | 251,000.00 | 519,500.00 |  | 42,004. 14 |
| Idaho. | $900,000.00$ | 178,000.00 | 10, 000. 00 | 34, 000.00 |
| Illinois. | 581, 312.99 | 1, 260, 090.00 | 229,550.00 | 364,294. 09 |
| Indiana | $340,000.00$ | 701, 500.00 | $68,158.34$ | 140,047.22 |
| Iowa. | $628,329.46$ | 600, 347.62 | 25, 920.82 | 97, 099.24 |
| Kansas. | 504, 548. 03 | 437, 909. 25 | 10,728.37 | 67, 294. 62 |
| Kentucky | 185, 925.00 | $533,917.74$ | 37,659.98 | 89,672. 21 |
| Louisiana |  | 82, 216.00 | 10,000.00 | 22,687.42 |
| Maine... | 118,300.00 | 305, 015.00 | 20,000. 00 | 78,631.60 |
| Maryland. | 115, 943.00 | 141, 000.00 | 23,000.00 | 87, 864. 20 |
| Massachusetts | 219,000.00 | 1,489, 758. 15 | 45,000.00 | 396, 946.45 |
| Michigan | 1,005, 614.98 | 259, 616. 20 |  | 88,037.22 |
| Minnesota | 567, 992.84 | 1,640,000.00 | 157,162. 27 | 364,081. 64 |
| Mississippi | 211, 950.00 | 347, 195.98 | 21, 000.00 | 57, 930.21 |
| Missouri | 437, 353.99 | 1,151, 998.00 | 80, 725.00 | 185, 689. 32 |
| Montana. | 225, 000.00 | 168,000. 00 | 12,000.00 | 38, 500.00 |
| Nebraska | 181,821. 97 | 1,127,000.00 | 213, 750.00 | 292, 352. 61 |
| Nevada | $93,000.00$ | 231, 409.67 | 17, 000.00 | 53, 522.25 |
| New Hamps | $80,000.00$ | 167, 316.24 | 5,500.00 | 55, 920.75 |
| New Jersey | 116, 000.00 | 466, 500.00 | 5,50.00 | 52, 252.60 |
| New Mexico |  | 78, 870.00 | 1,107.24 | 29, 529.43 |
| New York | 688,572.12 | 2,989,344. 15 | $35,000.00$ | 676, 797.69 |
| North Carolina | 125, 000. 00 | 196, 651.49 | 10,000.00 | 37, 220.29 |
| North Dakota | 900, 000.00 | 152,000.00 | 27,700.00 | 54, 820.91 |
| Ohio | 524, 176.30 | 2,797,000.00 | 176,058.15 | 277, 573. 06 |
| Oklahom |  | 74,600.00 | 8,300. 00 | 33, 871.13 |
| Oregon. | 140,694. 38 | 128,500.00 | 26,583.95 | 73, 386.16 |
| Pennsylvania | 427, 290. 50 | $874,000.00$ | 43, 416.25 | 115, 679.73 |
| Rhode Island | $50,000.00$ | $300,169.57$ | 22, 300.00 | 48, 611. 12 |
| South Carolina | 95, 900. 00 | 474, 016.00 | 74,000. 00 | 108, 062.00 |
| South Dako | 1, 200, 000.00 | 102, 000.00 | 8,500.00 | 40, 777.96 |
| Tennessee | 396, 000.00 | 276, 500.00 |  | 62,150.04 |
| Texas | 209, 000.00 | 418, 814.36 | 40, 100. 00 | 107, 554. 66 |
| Utah. |  | 212, 668.96 | 13,750.00 | 45, 302. 61 |
| Vermont | 135, 500.00 | 734, 744.95 | $6,000.00$ | 69, 305. 77 |
| Virginia | 516, 468.00 | $969,801.31$ | 15, 000.00 | 227, 675.57 |
| West Virgin |  | 175, 000.00 | 11,985. 19 | 38,542.56 |
| Wisconsin. | $90,000.00$ $302,000.00$ | 1, ${ }^{4506,500.00}$ | 282,000.00 | 365, 300.00 |
| W yoming |  | 152, 455.00 | 9,268.46 | 33, 728.36 |
| Total | 14, 325, 794. 30 | 58, 944, 137.61 | 2,287,917.98 | 5, 994, 037.61 |

## CHAPTER XXV.

## MISCELLANEOUS EDUCATIONAL TOPICS.


#### Abstract

Contents.-The Indian Territory, by Hon. Henry L. Dawes.-Backward children in the public schools.-Engineering education in the United States, by Ira O. Baker.-St. Jean Baptiste de la Salle.-The development of public libraries, by C. A. Cutter.-The Hugo Grotius celebration at Delft, by T. J. McCormack.-When and why pupils leave school, by C. M. Woodward.-How can the business man of the future be best educated, by Arthur T. Hadley.-Elastic grading, by W. H. Payne.-Exl edition of Cuban teachers to Cambridge, Mass.


## THE INDIAN TERRITORY. ${ }^{1}$

By the Hon. Henry L. Dawes, LL. D.,

Formerly United States Senator from Massachusetts, and chairman of the Dawes Commission for the Five Civilized Tribes.

In order to understand the purpose for which the Commission to the Five Civilized Tribes was created, and the present condition of their work, it will be necessary to refresh our memories as to the conditions which caused its appointment. So much of the past of these tribes as is essential for this purpose is briefly this: These tribes are the Cherokee, the Choctaw, the Chickasaw, the Creek, and the Seminole, numbering about 64,000 at the last census. Seventy years ago they were living on their own lands in Georgia, North Carolina, and Mississippi, and to induce them to surrender these lands to the white men of the States where they were situated the United States gave them in exchange the Indian Territory. In the treaties made with them we conveyed the title to the lands directly to the tribes for the use of the people of the tribes, to hold as long as they maintained their tribal organizations and occupied them. This stipulation prevented their parting with them without the consent of the United States. We stipulated in these treaties that they should have the right to establish theirown governments without our interference-such governments as they pleased, not in conflict with the Constitution of the United States. We also covenanted with them that we would keep all the white people out of their territory. Having thus set them up for themselves in a territory far west of any of the States, beyond all further trouble, as it was thought, we left them to do as they pleased for forty years.

During that time they set up governments aiter the pattern of our own, at least on paper, with a chief magistrate chosen for a fixed term, a legislative council, and courts. They were more advanced in civilization than any other Indians in the country, though hardly enough so to justify the name by which they have been distinguished from the rest of the race. The expectation upon which these transactions were based was that they were sufficiently civilized so that thus isolated they would go on under the influence of our example to the attainment of our own civilization and our Government in all essential characteristics. This expectation was far from
being realized, for during that time they had made little, if any, progress. They had become slaveholders, and thereby made all labor of the master disreputable, and idleness worked its natural results. A few grew rich, while the less intelligent many in consequence grew poor. Their governments in all departments fell under control of these same few, who used them for their own gain, and their children every year, for lack of training and proper education, fell back of their parents in all the qualities essential to progress in civilization.

At the breaking out of the civil war they had made but little, if any, progress, and in many respects their condition was less hopeful than in the beginning. They cast in their fortunes with the Confederates during the war, and were the victims of spoliation to a terrible degree by the armies of both sides. At its end they were well-nigh beggars, stripped of everything valuable, and wretchedly helpless. We then entered into new treaties with them with some modifications of the old ones, not changing, however, the nature of their title to their lands. Slavery in the Territory was abolished by these treaties and the tribes stipulated to receive their freedmen into perfect equality of citizenship, with the right to an allotment of a specific number of acres of their land whenever their lands were allotted.

On this new basis they began anew in 1866, but under conditions and amid environments still less favorable to any development of well-ordered governments. They were no longer isolated from outside influences. States, as well as these Indians, had moved westward and were pressing upon their very borders. Their lands had become valuable by the discovery of vast deposits of coal and other material. Cotton fields of great extent and promise were developing, and vast areas of grazing lands were tempting the herdsmen of Texas. In the new treaties they had consented to the building of a railroad from north to south across their Territory, and the Missouri, Kansas and Texas road was built through its entire length from the north to its southern boundary, bringing in its train white employees at every station, and with them all necessary supplies, breaking down beyond repair all treaty obligation to exclude white occupation. Besides all this, white labor had taken the place of slave labor. In short, more than 300,000 white noncitizens had, under various conditions, taken up permanent residence in the Territory. These people had no legal status or right among them. Some were there on invitation, some had come as hired laborers, and some were there on sufferance. They had come to stay, and the obligation of the treaty to keep them out had become a dead letter. Yet these 300,000 had no title to a foot of land, had no voice in the government under which they lived, and no protection from its officials or laws, were excluded from its courts and their children from its schools. They built towns on land to which they had no other title than a permit of no legal value, for which they paid tribute to some irresponsible holder, and governed them as best they could. Thirty thousand white children of school age were being left without any other provision for education than such as could be afforded from the scanty earnings of the pioneer. Then came a worse evil into their midst. The Territory became a refuge for fugitives from the justice of neighboring States. Warrants of arrest could not follow them across the line, and no provision of the Constitution or of law required their extradition.

It is not necessary to enlarge upon the deplorable condition into which these elements were sure to plunge the Territory, from which its government, such as it was, in the hands of comparatively a handful of the population, could have no power to relieve it. And we had bound ourselves to stand aloof and not interfere, whatever might take place. That such a government should exist in the midst of the States of the Union independent of us, yet under the same flag, was an impossible anomaly of itself. It also contained elements of discord which under any circumstances made the maintenance of peace and orderly government within its own borders for any length of time next to impossible. It had become peopled by two races in which the one owning the soil and having control of all the functions of government was
to the other race as less than one to three, making certain sooner or later an ourbreak for relief, violent and bloody, like all other conflicts of races for power.

Under these conditions it was that in 1893 the Government felt compelled to undertake the removal of this menace to its own peace as well as to that of the Territory itself by an effort to induce these anomalous governments with their communal land titles to exchange them for political institutions and land tenure in harmony with our own. The task was to obtain their consent to so great and radical a change, for all these conditions were titles vested and guaranteed by treaty, which could not be changed without their consent. It was for this purpose that the commission was created in 1893, and for which it is still engaged.
The first task before the commission, and that which has proved the most difficult, was obtaining agreements with them that any change at all should be made. In addition to the traditional pertinacity with which the race clings to its own customs and ways it encountered adverse interests and business investinents that had grown up and been fostered under existing governments, as well as distrust so natural and constant in all negotiations with Indians and the difficulty of comprehension of the full meaning of the proposed change. A recital of details would not be profitable. Suffice it to say, that after repeated failures and after repeated rejections of agreements signed, sometimes by the tribes and sometimes by Congress, agreements have finally been signed and ratified with the Choctaws, Chickasaws, and Seminoles, providing for the allotment of all their lands, except such as are reserved for town sites and public uses, among such persons as shall finally be found by the commission to be citizens, the substitution of United States laws and courts for those heretofore in force in these tribes, the expenditure of their revenues by United States officers, and the supervision of their schools by officials appointed in Washington. A time in the future is also fixed in each when the tribal governments shall give place altogether to governments Territorial in character.

The Cherokees and Creeks declined to treat with the commission at all for a long time, till the patience of Congress was exhausted, and in 1898 a law was enacted requiring to be done substantially the same things in these tribes that had been agreed upon by the others, excepting the allotment of their land in fee, which could not be done without their consent. Instead the commission was required to allot the use of the surface only. It was provided that any change in the provisions of this law might be effected by agreements duly ratified by both Congress and the tribes, respectively. Accordingly agreements were entered into during the last winter with both these tribes substantially like those already effected with the others, but too late to be ratified before the adjournment of Congress. There is every reason to believe that they will be duly ratified at an early day. When that is done there will be agreements with all the tribes for the changes desired, in substantial uniformity in all essentials and in harmony with the institutions and laws of the adjacent States.

These agreements require much work still to be done in carrying out their provisions. These agreements require the commission to allot the lands of the tribes to citizen Indians alone and make it the judges of the question who are such Indians, subject to an appeal by aggrieved parties to the United States courts. They are required in so determining to strike from all existing citizenship rolls all names in their opinion wrongfully there, to add all names wrongfully excluded, and to admit all new applicants entitled, in their opinion, to citizenship according to the laws and usages of the respective tribes. This requires of them a judicial determination on evidence offered on every name in the whole roll of citizens in all the five tribes about which there is question, and on all new names of applicants. The impression got abroad that blood, however attenuated, without regard to the other requirements of the laws and usages of the tribes, entitled one to admission to citizenship. Accordingly crowds of applicants came from all the adjacent States, and even froni Northwestern States, for the first time into the Territory, claiming citizenship upon some
claim of Indian blood in their veins, regardless of residence and citizenship elsewhere all their lives.

The commission was compelled to pass judicially upon more than 7,500 such claims, embracing in classes and families, relying on the same facts, very many thousand more up to the close of the last fiscal year. In the vast majority of these cases the evidence failed to disclose blood enough to sustain anything beyond imagination or pretence. Through all this maze and this labor the commission has completed the roll of the Seminoles and nearly so of the Choctaws and Chickasaws, the much larger part of the Creeks, and are beginning the like work among the Cherokees. After this they are required to allot these lands to such only as appear on these rolls. But this is to be done in a manner quite different from that of the government on the reservations, where little more is required besides setting off a given number of acres of land of uniform quality to each Indian found on the agency roll in such part of the reservation as seems best to the allotting commissioner. Such a method of allotting the Indian Territory in its present condition would be manifestly unjust. The construction of railroads through its length and breadth, the influx of 300,000 noncitizens building large and flourishing towns and inaugurating business enterprises of great importance, and the discovery of coal deposits of great value, all these have contributed so to unsettle relative values that the greatest injustice would be inflicted if allotment were to be made by equality in acres. All citizens have an equal right in the value of their lands, and when allotted that equality must be preserved. Yet an allotment of 50 acres near a railroad station, or near the town of Ardmore or Muskogee, or in the neighborhood of a working coal mine, would be worth more than one of 200 or 300 acres situated in some parts of the Territory. Therefore it is required that allotment shall be made by equality of value as near as possible, taking into consideration the fertility of the soil, location, and all other elements of value, so that when completed each allottee will have his equal share in value without regard to the number of acres.

This just requirement has imposed upon the commission the most difficult and perplexing of all its labors. It requires a personal knowledge of the conditions affecting the value of every acre of land in a territory as large as the State of Indiana, if it is to be of any service in such an adjustment, and an instinct todistinguish between real and fancy values. This has been its endeavor in its efforts to discharge this important but exceedingly difficult portion of their duty. They have completed that work also in the Seminole country, so that now all preliminaries to final allotment to the members of that tribe are completed. The final allotment there will be commenced at an early day. In the Creek and the Choctaw and Chickasaw tribes good progress has been made in the same work, and its completion there also is near at hand. It will be undertaken in the Cherokee tribe as soon as the necessary force now engaged elsewhere can be liberated for that purpose. There is much other detail connected with this work which it would be neither interesting nor instructive to recount here. What has been described will enable the conference to form an estimate of the character and progress of the work.

That so much time has been spent by the commission and such care taken in matters preliminary to final allotment has arisen from the belief that a just and wise system of land tenure is the basis upon which the superstructure of a prosperous State must ultimately arise, and the conviction that any misstep here would be attended with irreparable injury. It has, therefore, been the especial endeavor of the commission that no mistake in these preliminaries which it could avoid should jeopardize success. It is now carrying on the work under conditions more favorable and encouraging than at any time heretofore. A great change has, since the beginning, come over the attitude toward them and their work of the people most affected by it. Distrust has disappeared and opposition ceased. In their place hearty cooperation of those influential in the control of affairs is helping to push on the work. Most able
and earnest men are at the head of their respective governments, giving effective aid in securing a wise and speedy solution of the difficult problems before them. Within a few weeks past the chief magistrates of two of these tribes, the Chickasaws and Creeks, have delivered their annual messages to their respective legislative councils, treating largely, and in the most hopeful tone, of their future, and urging wise measures in view of the new conditions confronting them. These messages would well become the governors of the oldest of the States in the propriety and ability as well as temper and style in which they presented matters concerning the welfare of their people. The guidance of such men is full of promise that statehood in the near future is sure to come to a Territory so rich in all the elements of a healthy growth.

## BACKWARD CHILDREN IN THE PUBLIC SCHOOLS. ${ }^{1}$

Abstract of report of committee on compulsory education, presented to the Civic Club November 18, 1899, and to the Public Education Association of Philadelphia December 4, 1899.

Present need.-The Pennsylvania law compelling attendance at school now excepts children physically or mentally disqualified, and the nonattendant books of the enumeration of 1899 show 111 children mentally incapable of attendance at school. In the ordinary elementary school, where each teacher has from 30 to 100 children, it is indeed difficult to see how a defective child can secure the individual attention necessary to his progress, yet defective children may be found to-day on the back seats of many of our schoolrooms, where their attendance is a serious hindrance to the progress of the class, and they themselves derive little benefit.

English report.-Last March a report of the English education department was received, of which the authority and thoroughness were such as to make its recommendations important, and the conclusions of the report are that special day schools or classes for educable defectives between 7 and 16 years of age should be established by local school authorities as part of the regular school system.

Philadelphia school.-Following this report, a beginning was :aade in July, 1899, by the compulsory education committees of the Civic Club and the Public Education Association in the Philadelphia School for Backward Children. The board of public education allowed the use of the Hollingsworth School, Fifteenth and Locust streets, and of two manual-training benches. Funds have been subscribed privately.

Methods.-Blank forms were made up into a record book for each child, the last three forms being used only for successful applicants:

Form A: Characteristics and attainments of the child at time of nomination.
Form B: Medical examination.
Form C: Medical recommendation.
Form D: Life history and family history of child.
Form E: Progress in special class.
Form F: Subsequent medical examination after six months in special class.
These forms serve as the basis of admission and later for a review of progress. Teachers are invited to apply for such educable backward children as have been in their charge not less than six months and are, in their opinion, fit for special classes. Pupils were originally secured through those in charge and through the press.

Instruction.-During the summer the instruction was supervised by Miss Bancroft, Miss Cox, and Miss Williams, principals of the Haddonfield School for Mentally Deficient Children. Two teachers were in charge, with an average attendance of 17 pupils. The instruction covers manual training, physical exercise, and mental work of primary grade. Hours of instruction are from 9 to 2 , with rolls and milk or
soup at noon. Two public drills have been held; also there have been five excur-sions-to the Zoological Garden, through Miss Cox; to the Haddonfield school, to the home of Miss Mary T. Mason, to Horticultural and Memorial halls, and to the exposition, by pass through Mr. Raborg. By the courtesy of Dr. Tidball the school was reopened in October in the basement of St. Luke's Church, Thirteenth street below Spruce street, where it is now in session.

Medical supervision.-Medical supervision is essential to the education of defective children, and the success of the work is largely due to Dr. C. W. Burr, chief medical adviser, and to Dr. A. F. Witmer. The latter visited the school almost daily at first, and prescribed the physical exercises. These consist in the use of a broom, walking ladder, beam, board, sloyd work, and Swedish movements. Special memoranda were tabulated for each child for the teacher's use, and a special dietary recommended to parents in many cases.

Parents' meetings.-Two parents' meetings have been held, with great interest and success. The first was a talk by Miss Bancroft, telling what could be accomplished for backward children whose parents were courageous. The second was by Miss Lyndall, of the Girls' High School, on the especial need of backward children for nutritious food, and how to secure it.

Results.-Tabulated questions as to the improvement of children have been sent to the parents, and show highly gratifying results. More than one writes, "Friends, ignorant of -_'s attendance at the school, have remarked general improvement."

Aims.-Before commencing even to organize the work the proposition was outlined to the superintendent of schools and the president of the board of public education. Both expressed interest, and it is our hope that as with the kindergartens, with sewing, cooking, and the vacation schools, the initiative of the voluntary societies may find its proper sequence in the weeding out by the board of public education of the backward children now in the regular schools, and their instruction in special classes or schools. In Philadelphia public provision for backward children is as yet institutional only in character. Institutionalism has its faults, and there are many backward children for whom removal from home is either unwise or impossible. Education for these children is imperative. The value of competition and companionship is as great among backward as among normal children. The alternative is between preventive progress and a degeneration that leads in many cases to the almshouse, the asylum, or the prison. The hope of special day schools for backward children is to make self-supporting members of society, as has been done abroad. Already some of the children in the Philadelphia schopl show special aptitudes, and it will be our effort to cultivate these aptitudes as a means of self-support.

Other cities.-Of similar schools in this country, Providence, R. I., started the first in 1894. She now has four schools within the public-school system, as is Boston's one school. Chicago has one, under the auspices of the university. Both the latter were simultaneous with the Philadelphia school.

Other countries. ${ }^{1}$-In Europe Germany was the pioneer, in 1867. Norway followed her lead in 1874, and England in 1892, besides Switzerland and Austria.

In Prussia, since 1880, the establishment of special classes or schools for defectives has been obligatory upon towns of 20,000 population. Admission is limited to children who, after two years at a public elementary school, have proved themselves unable to do the work. The duration of attendance is usually six years. The auxiliary schools, as they are called, are usually in the same buildings with other schools, or near them. To prevent possible disturbance the times of opening and closing are fifteen minutes later than in the regular schools. The cost is borne by the town. Teachers receive from $\$ 25$ to $\$ 100$ a year supplementary to the regular salary. Of the children that left at Easter, 1893, the following percentages were capable of earning a living:

[^23]In Aix, 68 per cent; in Düsseldorf, 80 per cent; in Cologne, 87 per cent; in Brunswick and Crefeld, 90 per cent; in Dresden, Halberstadt, and Hanover, 100 per cent.

Out of 71 who left Elberfeld in 1893, there were 17 artisans, 4 errand boys, 1 clerk, 5 unknown, 13 housework at home, 4 domestic servants, 12 factory hands and day laborers, 15 without work, owing to illness.

In Norway children tested in the special classes are (a) returned to the regular schools if they make sufficient progress, or (b) they remain in the auxiliary classes the whole of their school lives, or (c) are sent to an institution for mentally deficient children if their condition prove too low for special day schools.

In England, as on the Continent, the proportion of children in need of special instruction is found to be 1 per cent of the total school population. In June, 1899, London had 43 centers, with 85 classes, and an average attendance of 1,289 children receiving special instruction. Average attendance to one teacher there is 15 . The average on the roll in London is 20 ; in Germany, 21; in Switzerland, 19, and in Norway, 12. In London there is a special superintendent and assistant for these classes. Some of the girls attend laundry and cooking classes, a few boys are taught cooking, and a few swimming. In England special instruction of backward children was made permanent in August, 1899, by a law to regulate the establishment of special schools or classes and to bring defective children within the provisions of the compulsory-attendance statute.

Solution for Philadelphia.-Medical inspection of schools and reports from teachers will show the number of backward children now in our schools, and already one attendance officer (first district) has referred one child to the Philadelphia school. In special public schools Nos. 1 and 2, for truant and incorrigible children, the principals report a number of cases in which the cause of irregularity is mental deficiency. Superintendent Brooks presented the subject to the committee on elementary schools of the Philadelphia board of public education in October last, and his report is still before them. He stated his opinion that the act of 1876, authorizing special schools for the deaf within the public-school system, might serve as a precedent. On November 29, 1899, the Civic Club authorized a resolution to the board of public education, urging the separation of the backward children in the regular schools into special classes, to be located in schools where there are vacant rooms.

Appeal.-Contributions to the Philadelphia school up to November 9, 1899, were $\$ 899.50$, and the balance in the treasury $\$ 215.75$. Contributions to the Philadelphia School for Backward Children will serve to maintain it as an object lesson until the city undertakes the work.

ENGINEERING EDUCATION IN THE UNITED STATES AT THE END OF THE CENTURY.

Address by Ira O. Baker, president of the Society for the Promotion of Engineering Education. Reprinted from "Science."

*     *         * Technical education, the application of the sciences to the needs of man, is a growth entirely of this century. Apparently the first technical school in the world was the École Polytechnique in France, established in 1794 to train men for the artillery and engineering corps of the army. The United States Military Academy was founded in 1802, and for more than thirty years thereafter was the only organized agency for engineering education in America. For three-quarters of a century a surprising proportion of the graduates of this institution practiced engineering in civil life, not because the education there given was what would now be called engineering instruction, but because it was the best preparation for engineering practice that could then be obtained. Apparently this fact has been overlooked alike by friendly and unfriendly critics of this noted institution. In 1825, at

Troy, N. Y., was organized the first institution in the world for giving instruction in engineering not military. Apparently at the time of the founding of this institution the term civil engineering had not been coined, the word engineering being synonymous with military engineering.

For thirty years after the establishment of the engineering school at Troy-i. e., from 1825 to the close of the civil war-only four engineering schools were founded, of which only two were really entitled to the name engineering. During this time the engineering schools gave but little technical instruction; most of the so-called engineering part of the course consisted of mathematics and elementary science.

In 1862 Congress passed an act giving to the several States public lands for the benefit of "instruction in the arts and sciences relating to agriculture and the mechanical arts." Shortly after the close of the civil war many of our engineering schools were organized under this act. Never was there a movement more timely or more successful than this, since it has resulted in the establishment of 64 technical colleges-at least one in each State and Territory. Fifty of them give instruction in one or more branches of engineering.

The number of institutions at present giving instruction in engineering is shown in Table I. The institutions are classified with reference to their requirements for admission according to the scheme presented by the committee on entrance requirements (see the annual report of the society for 1896, pages 103-104). The report of the committee includes 110 institutions, but the writer concludes from a careful study of their catalogues that at least 12 of these have no engineering course. The writer has received no report from seven of the United States institutions listed by the committee, nor from the two Canadian engineering schools.

Table I.--Institutions giving instruction in different branches of engineering in 1898-99.


Table II shows the number of students in the several branches of engineering for the year 1898-99; and Table III the number of graduates for the year 1899. These data were collected from the institutions for this purpose. A few schools were not heard from, but in each case they were small ones having few, if any, engineering students, which fact probably accounts, in some cases at least, for their failure to report. Therefore, Tables II and III may be considered as representing the total number of engineering students and graduates for the year 1898-99. During the decade 1889-1899 the number of students increased from 3,043 to 9,659 , or 317 per cent; and the graduates increased from 483 to 1,413 , or 242 per cent. However, in this connection averages are misleading, since the rate of growth for the different courses vary greatly. For example, from 1889 to 1899 the increase of civil engineering graduates was 56 per cent, and of mechanical 117 per cent; while the entire growth in electrical engineering is practically a matter of the past decade.

Table II.-Students in different branches of engineering in 1898-99.

| Institutions. | Number offering courses in- |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | C. E. | M.E. | E. E. | Min. E. | Arch. | Nav. A. | S.E. | Total. |
| Class A. | 1,359 | 1,579 | 1,405 | 245 | 366 | 54 | 19 | 5,027 |
| Class B. | 794 | 435 | 510 | 313 | 20 |  |  | 2,072 |
| Class C | 463 10 | 919 337 | 299 | 293 | 3 |  |  | 1,902 |
| Class E. | 41 | ${ }_{23}$ | 106 27 | 4 |  |  |  | 95 |
| Total. | 2,667 | 3,293 | 2,397 | 860 | 389 | 54 | 19 | 9,679 |

Table III.-Engineering graduates in 1899.


Table IV presents some interesting statistics as to engineering education in comparison with the so-called three learned professions-theology, medicine, and law. The data for the first three columns of Table IV were compiled from Bulletins 7, 8, and 9 (Professional Education in the United States) published by the University of the State of New York.
The data in Table IV concerning the length of high-school course required for admission to engineering schools must be regarded as only roughly approximate. It is difficult for one not acquainted with all the facts to determine from the catalogue just what the requirements are; and the need of these data was not foreseen when those in the preceding tables were asked for. Further, the value of a year of highschool study varies greatly even within the limits of a single State, which adds materially to the difficulty of making a correct general statement as to the conditions for admission.

Table IV.-Professional education in the United States. (Data for 1898-99.)

| Item. | Theology. | Law. | Medicine. $a$ | Engineering. |
| :---: | :---: | :---: | :---: | :---: |
| Number of sehools.. | 165 | 86 | 156 | 89 |
| Growth since 1878 .........................per cent.. | 32 | 144 | 82 | 21 |
| Number of instructors | 1,070 | 970 | 6, 416 |  |
| Number of stüdents.- | 8,099 | 11,833 | 26,088 | 9,659 |
| Growth since 1878 ...........................per cent.. | 87 | 294 | 142 |  |
| Number of graduates ............................................ | 1,193 | 3,110 | 5,725 | 1, 413 |
| Requirements for admission: |  |  |  |  |
| College degree .............................per cent.. |  |  |  |  |
| Completion of junior year .-. | 11 | b2.3 | c 0.7 | c1.1 |
| 4 -year high-school course.................................. |  | 3.5 | 8 | 4.1 |
| 3 -year high-school course | 11 | 14 |  | 24 |
| 2-year high-school course | 4 | 13 | 3 | 51 |
| 1-year high-school course | 1 | 9 | 62 | 17 |
| Common-school course | 11 | 30 | 19 |  |
| None or indefinite | 17 | 28 | 1 | 4 |
| Total reported.............................per cent.. | 100 | 100 | 100 | 100 |
| Length of course: |  |  |  |  |
| 4-year course ................................................. <br> 3 -year course | 24 70 | c 51 | 91 6 | 98 |
| Less than 3-years |  | 43 | 3 | 1 |
| Total reported...........................per cent.. | 98 | 94 | 100 | 100 |
| Average length of yearly session.................month.. | 8 | $7 \frac{1}{4}$ | 7 | 8.7 |

[^24]$b$ Require college work.
$c$ Per cent.

There are several matters in these tables that invite discussion. For example: 1. Why do so few institutions offer instruction in architecture? (See Table I.) Why so few students in architecture? (See Table II.) 2. The significance of the fact that more than half of the engineering students are receiving their education in Class A institutions, i. e., those having the highest requirements for admission. (See Table II.) 3. Are the number of graduates more or less than required to fill the ranks of the profession? 4. Is the number of engineering graduates greater or less, in proportion to the demands of the profession, than law and medicine? 5. Do the data in Table IV justify the usual classification of schools of law and medicine as postgraduate and engineering as undergraduate? In this connection the fact must not be orerlocked that some of the students in law and medicine have more or less college training before entering upon their professional course, and the same is true in engineering, but to a much less extent. Time forbids a consideration of these questions here.

But statistics can not represent the most important developments in engineering education in the last third of the closing century. Immense strides have been taken in both the method and the scope of instruction. At the close of the civil war there were nominally only six institutions giving any grade of instruction in engineering; and for ten or fifteen years thereafter the engineering instruction offered by the best institutions is hardly deserving the name in comparison with that offered by many institutions at the present time. During this period some of the engineering instruction was practical and not scientific, and some was scientific and not practical; but none of it consisted of the principles of scientific engineering, nor of the relations of the sciences to engineering problems. Text-books were few and poor. The equipment of the schools was inadequate. Then the student went to college to learn details of practice and to fill his notebook with formulas; he was reluctant to give his best efforts to the acquisition of fundamental principles and to the development of the ability to see straight and to reason correctly. Happily now all that is changed, and the schools of America are now offering unexcelled facilities for the acquisition of the fundamentals of an engineering education, and the students are laboring heroically to ground themselves in the principles of scientific engineering.

Twenty-five years ago practitioners had doubt as to the value of a technical training for young engineers and distrusted the engineering graduate, but now general managers and chief engineers prefer technical graduates, since they have been trained in scientific methods of working, and have a knowledge of the fundamental principles underlying all engineering practice, and look out upon the world of truth from the view point of a man of science. The national engineering societies now give credit for training in the engineering school toward the requirements for admission to membership. The most cordial relations now exist between practitioners and the schools of engineering. Within recent years, largely, if not mainly, through the influence of the technical schools, engineering has ceased to be traditional and has become scientific.

The technical school met with no welcome from the older colleges and universities. In the beginning the devotee of the nontechnical subjects was not willing to admit the study of engineering as being upon the same high plane as that of literature, history, and philosophy. Now all who know the facts are ready to admit that the engineering student secures greater advancement during his college career than any other undergraduate. This result is due to the definiteness of the aim of the engineering student, to the stimulus of professional preparation, and to the nature of the study.

One of the most important advances in engineering education has been the introduction of the laboratory method of instruction. Now all the better institutions have extensive and well-equipped laboratories fitted up especialiy for experimental work, in which the student receives instruction of the very highest value. In this
respect our American schools are unrivaled in the world. In Europe, particularly in Germany, are some notable and well-equipped engineering laboratories which have done much to advance engineering science, but which are used by experts in research and commercial work and not for purposes of instruction. Although our engineering laboratories are maintained primarily for purposes of instruction, a considerable amount of research work is performed in them.
The curriculum of the engineering college at present consists of about 10 per cent of English or modern foreign languages, usually the latter; 30 to 40 per cent of indirect technical studies, as mathematics, physics, and drawing; and 50 to 60 per cent of technical work. The tendency is to make the engineering courses as completely professional as are courses in law and medicine. Experience has shown that it is impracticable to teach culture subjects in a course with strongly marked technical tendencies, since the student devotes all his time to the latter and neglects the former. Very recently there has been a tendency to force some of the indirect technical subjects, as advanced algebra and trigonometry, into the preparatory school to get more time in the engineering college for directly technical subjects. The effect of this is still further to curtail the culture studies of the engineering students by eliminating these subjects from the preparatory course.

A number of institutions offer postgraduate instruction in engineering; but the number doing postgraduate work in engineering is less than that in science or literature. In 1898-99 at 23 leading institutions the average per cent of graduate to undergraduate students in nonengineering departments was 9.94; in the engineering departments, 2.3; or, in other words, the per cent doing graduate work in nonengineering courses is more than four times greater than in engineering courses. In the above computations graduates doing undergraduate work are considered as undergraduate students. But few, if any, Americans now attend European engineering schools, for it is generally conceded that the American schools, in equipment, methods, and scope of instruction, are superior to any European schools, at least for American engineers. There are at least three reasons for the relatively small number doing graduate work in engineering:
(a) In many cases, if not in a majority, the chief object of postgraduate study is to secure the preparation necessary for teaching the subject. In many branches the whole range of study, both undergraduate and postgraduate, is purely academic • and can be obtained in college environments better than anywhere else. But in engineering the prospective teacher must secure a personal acquaintance with the conditions of practice, which can be obtained only by engaging in actual engineering work. In short, the future teacher of engineering prefers to engage in practice after graduation rather than to return to college halls for further study.
(b) Probably many students pursue an engineering course chiefly because it promises an early means of securing a livelihood, and not unnaturally feel that they can ill afford the means required for postgraduate study. Others who are financially able to continue collegiate work beyond graduation are more anxious to have a part in the activities of the outside world than to pursue postgraduate study. At present the demand for engineering graduates is such that in both of these classes, at least those that are really deserving find little or no difficulty in obtaining remunerative positions in practical engineering work. The engineering college is attempting to give a professional training to its graduates, and it is not surprising that they are anxious to apply in practice that which they have been studying in college. A few years ago many engineering students were unable to resist the seductive offers of positions in actual practice and left college before graduation. Recently the demand has been almost exclusively for graduates, and now a much larger proportion than formerly stay to graduate. When the competition of young engineers for positions becomes greater, as it doubtless will, probably a greater proportion will be willing to engage in postgraduate study. But this element may not become very effective in increasing the number of engineering students seeking advanced collegiate work, for
some of them may prefer to serve for a time after graduation as apprentices at comparatively low salaries. Already there are evidences of a considerable tendency in this direction.
(c) The third reason for the less number of postgraduate engineering students is by far the most important. Ordinarily postgraduate study is primarily intended for independent research work; and this is properly so, for after a young person has been under the direction of tutors for fifteen or twenty years it is time that he should attempt to blaze a road for himself. If this research work is really original, it will inspire the highest ambition of the student and will secure his utmost efforts. This class of work will always attract. But departments of study differ greatly in the opportunities for original research. The less fully developed branches of study doubtless have many unsolved problems waiting for investigation, and some of these are such that a recent graduate may reasonably be expected to solve them, or at least to collect part of the data required for a subsequent solution. Engineering postgraduate study offers fewer opportunities for this class of work than many other departments of collegiate work because of the more fully developed state of most branches of engineering knowledge. Again, the nature of the investigations in many departments is such that they thrive better in a college atmosphere than anywhere else. This is not true, in general, of engineering investigations. Finally, and most important of all, original research in most departments of study is carried on only because of the enthusiasm of the investigator or by public or private benevolence; while in engineering most of the research work is done in connection with practical work at the expense of individuals or corporations or municipalities having a direct financial interest in the result. Many engineers devote a large part of their time to original research work, and nearly all practicing engineers have more or less of such work. The life of an engineering student before and after graduation is much more nearly continuous than that of a student in most other departments. The ambitious engineering student knows that shortly, if not immediately, after graduation he can secure actual engineering practice of high educational value, and many choose positions chiefly with reference to the value of the experience to be obtained. The salary, the educational value of practical experience, the possibility of promotionall draw the engineering student away from postgraduate study. In other words, the study of engineering is essentially graduate work, and there will probably never be any considerable number who will pursue engineering studies beyond the present four-year course. But there are sufficient reasons why adequate provisions should be made for the competent and ambitious few who seek truly graduate instruction in engineering.

All the preceding is intended to show in rough outline the present state of engineering education, and particularly the rapid growth. The present phenomenal rate of progress promises still larger things for the future, and lays upon this society important responsibilities in directing the future development of engineering education in America. In this connection there are several matters which invite the careful attention of individual members of this society, and possibly are worthy of official action by the society itself.

1. Is any general movement for increasing the requirements for admission desirable? The standard has been rising quite rapidly within the past five years, particularly in mathematics, English, and foreign languages, but even now comparatively few of the engineering departments of the universities have as high requirements for admission as the literary departments. Is this justifiable?
2. Is it wise to require advanced algebra and trigonometry for admission to the engineering courses? Is it wise to require prospective students to take these subjects in secondary schools to the exclusion of subjects in science, literature, or history? Will the forcing of these subjects into the curricula of the secondary schools handicap them in discharging their just obligations toward students who are not seeking
an engineering education? Which subject can the preparatory school teach the better? Which school will teach the mathematics the better?
3. At some institutions a considerable number of engineering students have had previous collegiate training. Can anything be done to increase their number?
4. Engineering courses have become so highly specialized that frequently students of one course receive no instruction in the fundamental technical subjects of a closely allied branch of engineering. This practice is burdensome upon the school and is probably not of the highest advantage to the student. But the colleges are not likely to retrace their steps, and therefore the highly specialized course is a condition to be reckoned with. Should anything be done to prevent further specialization? Some students correct the defects due to high specialization by remaining a fifth year and pursuing the allied course. Can anything be done to increase the number who do this?
5. The engineering course of to-day is so loaded with required technical and scientific work that the student has little or no time to cultivate those subjects, indefinitely, but not inappropriately, called the humanities. Engineering students, more perhaps than any others, need training in such subjects. Those who follow the other learned professions deal constantly in their technical work with the relationships of their fellow-men, while the engineer in his professional work deals mainly with the inanimate world. The engineer has little opportunity to come into intimate relations with men either through the study of history, economics, and sociology, or through personal contact. The engineer usually possesses strong character, sound judgment, thorough knowledge of his business, but frequently, because of a lack of that knowledge which other men consider essential in a liberal education, he is ranked as a relatively uncultivated man, and therefore is unable to exercise the influence his training justifies, and fails to secure the reward his abilities merit. Can the instructors in engineering create in the mind of the engineering student such a hungering for a knowledge of the humanities that he will secure it after graduation by private study and personal intercourse?

Such, then, are the conditions and the problems of engineering education as we step into the twentieth century. The present conditions have been determined largely by the engineering colleges themselves in advance of the demands of the engineering profession and of the general public, and often in opposition to such demands. Chiefly through the influence of the engineering college the engineering profession has developed during the past third of a century into a truly learned profession. There was never a time in the history of the world when the questions of general education were more carefully considered than at the present, and there was never a time when this country was more concerned with the work of the engineer than now. The nation, just awakening to a consciousness of its power and responsibility, is taking its place among the nations of the earth, and is seeking to decide the destiny of the peoples of the earth. We are now sending our manuiactured products to all parts of the world, and if we are to have part in the commercial conquest of the earth, it will be because of the ability, the foresight, the wisdom of our own engineers. The only agency seeking to prepare engineers for their work is the engineering college. Their work in molding and directing the engineering education of the future will be no less important than in the past. They enjoy the respect and confidence of the public, and a still wider field of influence and responsibility lies open before them. May the deliberations of this society continue to be a source of strength and inspiration to the engineering colleges. May the engineer of the twentieth century have better technical training, broader culture, and nobler aspirations. May the profession of engineering come to occupy a still higher position in the esteem and respect of the public.

## ST. JEAN BAPTISTE DE LA SALLE, FOUNDER OF THE CONGREGATION OF BROTHERS OF THE CHRISTIAN SCHOOLS-HIS LIFE AND WORK. ${ }^{1}$

St. Jean Baptiste de la Salle was born at Rheims, France, April 30, 1651. His parents were of noble lineage and distinguished piety. His father was judge of the presidency of Rheims, and several of his relatives filled eminent positions in the church and kingdom. Nor was the spirit of chivalry and adventure foreign to his family. It shone conspicuously in Marquette, the pioneer of American explorers, and in three young soldiers who fought with our continental troops in the war of independence.

Young La Salle was a child of grace from his earliest years. At the age of 8 he entered the University School of Rheims. His progress in study was rapid and pronounced. He stood among the leaders of his class. His father, who had destined him for law, was now convinced that his son would one day win a distinguished place in the magistracy. But Providence had ordained otherwise. The tastes and inclinations of the youth were for a higher state of life. When informed of his son's desire to become a priest, the father, though disappointed and chagrined, allowed him to follow the vocation to which he felt himself called.

He received the clerical tonsure March 11, 1662, in the archiepiscopal chapel of Rheims; he was in his eleventh year. At 17 he was named cannon of the Cathedral of Rheims; at 19 he completed his course of philosophy and graduated from the University of Rheims.

To pursue his theological studies he was sent to the Seminary of St. Sulpice, Paris. After five years he went up for his hicentiateship in theology and obtained it. He now prepared for ordination. On Trinity Eve, 1672, he received the order of subdeaconship, three years later that of deaconship, and on the eve of Easter, 1678, that of the priesthood. Still he discontinued not his studies. He prolonged his labors into the night in order to consecrate more time to prayer and study. At the age of 30 he brilliantly defended his thesis before the faculty of the Rheims University and was admitted to the doctor's degree.

All the biographers of St. de la Salle have not failed to admire his deep learning and penetrating genius. Few have endeavored to account for his extraordinary mental acumen. The secret of his great intellectual strength lay in his intense piety and angelic purity.
Speaking of his studies at the University of Rheims, Abel Gaveau said: "His purity of body gave untold brilliancy to his mind, enabling him to seize upon and appreciate the nicest distinctions in controverted questions, the choicest thoughts in literature, and the pivotal points in historical studies."

As a priest St. de la Salle was untiring in his zeal for souls. He had the gift of touching the most hardened hearts and of bringing them to God. He was always kind to the poor, but in the confessional his tenderness and compassion knew no bounds. To all he was a father and friend. When at the altar, his face became as radiant as if he had already enjoyed the vision of God. Frequently after holy communion he was seen to remain in ecstacy.

His mortifications and penances were incredible. The haircloth, the discipline, his long fasts, whole nights passed in prayer bear witness that he realized the sanctity of his vocation.

With true apostolic zeal he was always ready to take up any work in which there was question of saving souls. His spiritual director, Father Roland, had founded the sisterhood for the education of poor girls. Feeling his end near, he confided to the care of this young priest the isforinstitute. Well and faithfully did he acquit
himself of his new charge. Having assured the existence of the institute and its schools by letters patent from the King, he handed them over to the sisters.

The time had now come when he himself was to establish a congregation of Christian teachers.

As yet La Salle had no intention of founding a society of teachers. He merely assisted in the establishing of schools. By degrees the work grew upon him. Soon he finds himself surrounded by a number of young men, many of whom have just finished their classical studies. They had been struck by his zeal and selfsacrifice and they offer to become his disciples. He takes them to his own home, draws up rules for their government and begins to train them in the art of teaching. Thus was virtually established the Institute of the Brothers of the Christian Schools.

In 1681 La Salle opened his first schools. Their success was beyond his most sanguine expectations. The uniformity of method and discipline strikes the people with admiration. The fame of the schools spreads far and wide. Enlightened men favor their development and in a short time La Salle's schools are found in every important diocese of France. Several of the clergy in the towns and villages apply for a single brother to take charge of their schools. This the founder could not do. He had made it a rule that not less than two brothers teach in any school. At once he conceives the project of establishing training schools for lay teachers in country districts. In 1684 he established two such schools. The pupil masters were received gratuitously, but a strict examination preceded their admission. Those only were admitted who showed aptitude and talent for teaching. A similar institution was established for city teachers. These were the first normal schools ever founded.

Up to his time Latin was the basis of all elementary education. Children learned their mother tongue through Latin. The first book put into their hands was the Psalter. Not till children read Latin fluently were they permitted to study their native tongue.

La Salle was not slow to perceive the absurdity of such an illogical system. Immediately he opens the reform. Throughout all his schools he orders that "the first reading book given to the children shall be in French. Only those who can read this well will be allowed to read Latin." In this way he appealed to the intelligence of the child and prepared the way for the study of national literature.

Previous to La Salle's day the individual system of imparting instruction was general. With true scientific insight he devised a method which to this day has not been surpassed. It is known as the simultaneous system. Speaking of this system, originated by La Salle, Cousin, the great French thinker, said: "I regard simultaneous teaching as the only method which is suitable to the education of a moral creature."

La Salle's genius was prolific and far-reaching. He wished education to be universal; that it should extend to all the faculties, to all periods of life, to all classes of society, to all sezes. For this purpose he wrote and published treatises on education and methods; established primary and secondary schools for the poor; academies and boarding schools for the wealthy; technical schools and schools of design for apprentices; marine schools for sailors and their children; professional schools for young men over twenty, desirous of continuing their studies; agricultural colleges; public lectures in science and arts; seminaries for country teachers; normal schools for city teachers. Nor did he rest here. He drew up the courses of study for the respective schools. When compared with the curricula of similar schools at the present day, La Salle's suffer not by the comparison. What strikes one most about his courses is their practicability. For instance, in all his schools, beginning with the primary, he required: Religious instruction, reading, writing, grammar, rules of etiquette, arithmetic, bookkeeping, drawing, singing, and the copying of civil acts.

In the secondary schools were added history, geometry, algebra, surveying, cosmography, hydrography, pilotage; in the boarding schools commerce, finance, architecture, mathematics, and military art were also added. In the technical and the
professional schools, particularly those at St. Yon, the course includes history, physical geography, literature, rhetoric, science of accounts, geometry, architecture, natural history, hydrography, mechanics, calculus, cosmography, and several languages. The students had a botanical garden, a philosophical laboratory, and a valuable library. As an educator La Salle was far in advance of his day. Pope Pius IN aptly remarked that De La Salle's work is "rather destined for our day than his own."

Many improvements which we consider new were anticipated by him, such as object lessons, grading, special libraries for students, free lectures in science and art, the elective system of studies, summer schools, etc.

He was the first to assert the exclusive right of the teacher to devote his whole time to his school work. Before his time the schoolmaster's duties were multifarious. If he were a layman he generally acted as sexton; if a seminarian he had his own studies to get up for the priesthood. In either case it was impossible for the master to give undivided attention to his class. La Salle perceived this and inserted in his rule a clause forbidding his disciples to aspire to the ecclesiastical state. He was not a believer in double vocations; neither did he believe in making the teaching profession a stepping-stone to the priesthood.

In his views La Salle was liberal and expansive. He was wont to see in the march of events the guiding hand of Providence. He was never opposed to his disciples giving the highrer education, as his own life and work attest. Nor was he averse to receiving the sons of the wealthy. After the opening of his second boarding school he writes thus to the procurator-general on the subject. He says: "I believe that Providence intends we shall take the sons of the wealthy and give them a thorough Christian training in our boarding schools."

No man has ever exercised in pedagogics an influence equal to his. For forty years he labored in the science of teaching, and as a result of his work he has left a living monument, in which are embodied all the principles by which he revolutionized education.

After four decades of unwearied devotion to the cause of Christian education, this noble, saintly soul went to his reward. Posterity has classed him among the greatest benefactors of the race, his country has raised his statue, and the church, mindful of his virtues and heroic sanctity, has placed on his pure brow the aureola of sainthood.

## THE DEVELOPMENT OF PUBLIC LIBRARIES. ${ }^{1}$

By C. A. Cutter, of Forbes Library, Northampton, Mass.

In the first year of the nineteenth century the United States, with a population of five and a third millions, had 64 libraries intended for popular use, or, if we call the parochial libraries founded by Dr. Bray public, and assume that most of them survived the Revolution, there were 100 libraries containing perhaps 50,000 volumes in all. In the last year of the century there were over 10,000 libraries owning $40,000,000$ volumes, half of these libraries having over 1,000 volumes each. Thus, while our territory is less than four times as large and our population is only fourteen or fifteen times as large, there are one hundred times as many libraries containing eight hundred times as many books.

There is no means whatever of ascertaining how many volumes reached the readers of 1801, but it is unlikely that the output exceeded the stock, for it was a time of solid books and slow readers. In $1900,50,000,000$ volumes were issued; that is, the circulation has grown a thousandfold.

Americans have always been a bookish people. The very first colonists brought books with them from Europe. There were books, few but prized, in many households, and in time some private libraries of size and fame. Public libraries have a history almost as old. The Puritans had hardly landed when they founded a college and with it a library. Harvard College Library, born in 1638, was followed in 1700 by two others, Yale and William and Mary; and by twelve others in the following hundred years, so that our century began with 15 college libraries. It is ending with over forty times as many.

Joint stock libraries, implying cities and a certain amount of wealth, were of later origin. The first was founded in 1731 (twenty-seven years before the first proprietary library was established at Liverpool, England). By the end of the eighteenth century there were 32 such libraries. There are many more now, for they spread gradually throughout the country, often under the name of athenrum in the cities and of social library in the country. But they are not flourishing as a class, for the free public libraries are slowly ousting them. People in general will not pay for reading when they can have it for nothing. A few, either from old habit, or because they dislike the rush and bustle of a public library, or because membership is regarded as a social distinction, will frequent the proprietary library and pay their yearly dues, but the receipts from this source are too small for its whole support. With a large invested fund it may survive; without one it is doomed either to be dissolved or to be absorbed by the free library. In those States, to be sure, where the latter has not gained a foothold, the proprietary library continues its good work, and new ones may spring up. They are then very useful in showing the people what libraries are and in preparing the way for the adoption of permissive or compulsory library laws. Many were founded in the decade before and the decade after the civil war; yet in 1896 only 57 were reported that had over 1,000 volumes apiece.

The libraries of 1801 were small in a degree hard to realize, with our present ideas of necessary size. The oldest of them, Harvard College, had in 1790 only 12,000 volumes; the largest, the Philadelphia Library Company, after absorbing three similar libraries, had in 1807 only 18,391; in 1793 the New York Society Library had 5,000; in 1791 Yale College had only 2,700; in 1811 the Charleston Society Library had reached 7,000, and in 1809 the Boston Athenæum, founded only two years earlier, could report 5,750. These were the giants; no other library had 2,500; not half a dozen had 1,000; the average was 500 .

The character of the libraries was much more solid, or, if one pleases, heavy, than now-necessarily so, for the books of that day were in greater proportion serious. The college libraries were of course designed to be learned, for the use of the professors chiefly. In them thelogy naturally held the leading place, as the colleges had been founded mainly to educate ministers. So in the Harvard College Library catalogue of 1790,150 pages out of 350 are filled with theology, 10 with the Greek and Latin classics, 4 with books of travel, but only three-fourths of a page with periodicals. In literature, however, one finds Chaucer, Shakespeare, Spenser, Milton, Dryden, Pope, Gay, the Gentleman's Magazine, Rabelais, La Fontaine, Voltaire, Boccaccio. In 1765 Yale College was "well furnished with ancient authors, such as the Fathers, Historians, Classics, many and valuable works of divinity, history, philosophy, and mathematics, but not many authors who have written within these thirty years."

The social libraries were difierent. The Library Company of Philadelphia, whose selection probably was largely determined by Franklin's taste, no doubt was imitated by other proprietary libraries. It had scarcely one theological book or controversial tract; politics was not prominent; history, travels, science, natural history, and especially the mechanic arts, formed the bulk of the stock (but it must be remembered that a dozen of our sciences and a score of our arts had no existence then). Polite literature was scantily represented, especially in the department of fiction, the library committee in 1783 having instructed its London agent that
thongh not averse to mingling the dulce with the utile, they did not care to have him buy any novels-a rule which has largely prevailed since.

Art, which in the last decade has begun to fill so large a place on our shelves, was not to be found in any of the early libraries. The Boston Athenæum, however, received in 1838 from a generous proprietor a large number of works of art, and became the pioneer of bibliothecal art development.

The character of the reading differed somewhat from ours. It was in larger proportion the reading of the man who is curious about some one branch of knowledge, or the reading of the man who in a general way wants to improve himself. Fiction, which supplies 75 per cent of the circulation of the modern town or city library, was not furnished by either the college or the association libraries. For that the readers went to the circulating libraries, which no doubt seemed to the Sir Anthony Absolutes in this country, as they did in England twenty-five years before, "an evergreen tree of diabolical knowledge." But the proprietary libraries had been founded by "gentlemen desirous of promoting the diffusion of useful knowlege and extending the means of information," and as Duché writes in 1774, "for one person of distinction and fortune there were twenty tradesmen that frequented the library." These men came there to learn. It may be doubted whether women frequented the libraries at all. Amusement, the culture of the imagination, the culture of a love and appreciation of beauty must have been very much in the background.

The next variety of library to be established was the mercantile, with which are to be joined the young men's associations, mechanics' institutions, and apprentices' libraries. They sprang up in connection with the marked educational movement of the second and third quarter of the century, were designed mainly for young men who could not afford to purchase a share in the joint-stock libraries but could pay a small annual fee, and they usually had classes for evening instruction and courses of lectures. They were another step in cheapening knowledge. Like the social libraries, they flourished for a time, and are still useful where they have become solidly established, or in States where the free-library system has not yet penetrated, but they are destined to give way in time to their powerful rival.

They had an effect probably not in the least contemplated by their founders. Like all libraries, they were continually in want of money; they obtained it by extending their membership beyond the merchants and clerks of the original plan to anyone who would pay the annual fee. To attract the public, it was necessary to provide what the public wanted to read. Going into competition with the circulating library, they adopted its tactics, and the mercantile became as much lighter than the social as the social was lighter than the college library. So was the way prepared for the free public library, both by a lessened cost to readers and by a mitigated austerity in book selection.

The inadequacy of these libraries for any thorough investigation compelled the formation of special libraries-historical, theological, law, medical, scientific, oriental, and society. The century came in with five or six of these, and closes with as many hundred.

The private libraries were intended for the owner and his friends; the college libraries for the professors and their students; the proprietary libraries for the stockholders and their families; the mercantile, at least primarily, for the merchants and their clerks; the other libraries for limited classes. So far there were none for all the people, and none free. But in the Northern States all the people were beginning to want reading, and were rapidly becoming willing to tax themselves for it. With the second third of the century began a new era, which the little town of Peterboro, in New Hampshire, had the honor of inaugurating. At the instance of the Unitarian minister, a free library was founded in 1833 by an appropriation that has been continued annually to this day. Thus America became the birthplace of the free library, for the leaders of the movement, which resulted in the library law of

1850 in England, have said that they derived the idea from this country. But the town was in advance of its time. Thirteen years passed before another little townOrange, in Massachusetts-ventured on the same step; four years later Wayland followed. Neither of these had any right to spend their money so, but their lawlessness was not rebuked, and perhaps contributed to the passage of the acts by which New Hampshire in 1849 and Massachusetts in 1851 authorized any town to tax itself for a free public library.
A Bostonian has expressed his surprise that "Boston, a city with traditions of intelligence and education, gave no indications of considering this matter of free libraries till" it was over two hundred years old. He might have added that she spent a long time in considering; there were eleven years between the first suggestion and the decisive action in 1852; but when she finally adopted the idea there was no hesitation in carrying it out thoroughly. She has ended by collecting the largest stock, erecting the costliest building, and for the first forty years having the largest circulation of any city, in America.

Nor is this all. The library was in the hands of men who felt that this new creation had in it the potency of all libraries; that it might do the work of all that had preceded it and its own peculiar work besides. In other places some parts of a library's function may have been better developed, but nowhere yet has the happy combination of private and public liberality made it possible to at once so thoroughly suffice for learned research even of the specialist, gratify cultivated curiosity, please the bibliomaniac and the dilettante, foster idle meditation, or stimulate vigorous thinking, while yet not neglecting to meet every want of the general reader, even the want of amusement and illusion, and, more than this, to attract to itself and to train adults who have never been in the habit of reading at all and children who have not yet learned to read with profit. If in any way the library falls short, it has been in this latter work, which Western libraries have taken up enthusiastically and pursued most successfully.
Another class of free institutions had its origin a little after the town libraries. In 1835 a law of New York permitted each school district to tax itself $\$ 20$ to found and $\$ 10$ a year to maintain a free public library. But as the people would not tax themselves, the friends of the measure persuaded the legislature in 1838 to appropriate $\$ 55,000$ a year to purchase the books. Fifteen years later the libraries had over $1,600,000$ volumes, but they were very little used, except in the cities, and the system was an entire failure. Eleven years later, after half a million more had been spent, there were half a million volumes less. A school district is perhaps too small a territory for a successful library, but the real cause of failure was that among a people who are not eager for it reading will not take root except by wise management, and the charge of these libraries was in the hands of men who were not interested in them. A library always suffers when ruled by a school board, persons who, if not chosen for political reasons, are selected for their ability to administer an institution which has this only in common with libraries, that it is educational, but otherwise differs entirely in aims, personnel, material, and methods. In this case there was not even the safeguard of a librarian to look after the library's interests. The school trustees were often incompetent to select the books, and accepted any rubbish that bookseliers might offer. Such libraries, of course, did not attract readers. In 1892 New York wisely separated school libraries confined to school use under direction of school authorities from town libraries for public use under direction of trustees.

The century's library history falls into two main periods, the first three-quarters and the last quarter. The first is characterized by paucity, poverty, slow increase, slow development of purposes and methods, by conservatism, limitation, and restriction. The latter period shows an astounding increase in number and size, money given in an increasing ratio, library buildings going up all over the land, their suitability to their purpose improving, experiments making in administration, new
channels of library influence constantly opening; the collection of books, though no longer considered the main object, going on more rapidly; the use of the books, now regarded as the supreme consideration, daily spreading in all directions. The causes of this luxuriant growth are many. Chief, no doubt, is the increase in population and wealth, which has at the same time led to the foundation of hosts of new libraries and quickened the growth of those planted during the first period. Another cause is the spread of education and culture, furnishing an army of readers, with awakened minds. But it is to the librarians that are due the enlarged ideas of the library's mission and the discovery of the quicker and more effective ways of working which, by doubling the reach and power of libraries, have strengthened their hold upon popular favor and reenforced their appeal for philanthropic support. The change began when a hundred librarians met at Philadelphia during the Centennial Exhibition to exchange views and make one another's acquaintance. The librarian of 1876 was busy in his own library, and seldom heard what others were doing. There is little spread of professional ideas and no ${ }^{\circ}$ cooperation. The American Library Association, which was the result of the Philadelphia meeting, and the Library Journal, founded at the same time, have changed all that and brought improvement into every branch of library economy. A previous convention in 1853, though it promised well, came to nothing. The greater success of the meeting of 1876 was due in part no doubt to the ripeness of the time, to the elimination of the slavery question, to the greater culture of the nation, but mainly to the efforts of a small group of men who did not allow their interest to die out.

The essays by the leading librarians of 1876 , published in a thick volume by the National Bureau of Education, the papers and discussions at the conferences, and the other matter that fills the 13,000 pages of the Library Journal treat mainly of the five classes of subjects in which there has been the most progress-library establishment, the profession, the building, the management, and the methods of reaching the public.

The trend of opinion is toward libraries established by legislation, supported by taxation, helped as far as possible by private generosity, managed by their own authorities, free to all-the library of the people, by the people, for the people. Such libraries are coming into existence fast. To assist their establishment seventeen State library commissions have been organized, the first in Massachusetts in 1890. They work differently, according to the different needs of the States, but they all aim to fan library zeal where there are libraries, to arouse the desire for them where there are none, to distribute public aid to poor towns, and to enconage private giving everywhere. But legislatures should take one more step and oblige towns to have and properly maintain libraries as they already require them to provide schools.

The gifts to libraries, though far smalier than those to colleges, owing in part perhaps to the more effectual solicitation of college presidents, have been remarkably generous-at least $\$ 25,000,000$ in the last ten years. The larger part of the greater gifts have come from men who had made their own fortunes and desired that others should have the opportunities of learning which they had missed in their povertycramped boyhood. Many library buildings and some endowments have been given to country towns by farmers' sons who, having migrated to cities and found success there, sent this token of regard to their old homes. Less, probably, has come from inherited wealth; how much less, statisticians have not stated. Most donors, it is found, prefer to give something material and visible-a building rather than a fund for buying books, books rather than a fund for making them useful. But there are a few laudable exceptions.

The old writers on library topics were always prone to enlarge upon the qualities needed by the librarian. They would have him in business a hustler, in learning a scholar, in book buying a critic-but a broad-minded critic-in memory a Magliabecchi, in languages a Mezzofanti, in tact a Metternich, in administration an organizer
and a disciplinarian, in temper an angel, and everywhere an enthusiast, for the librarian who is indifferent is lost. But such prodigies must always have been rare, and even they could not alone have met the demands of a modern library. He needs assistants. It was early seen by the association that the best work could be done only by specially educated persons; that librarians were constantly losing time in training new assistants; that libraries were continually checked in their progress while librarians without experience were learning their trade, and that many were condemned to stagnation because the new librarian simply plodded on with more or less stumbling in the footsteps of his predecessors. The solution first suggested was apprenticeship; the next, more radical and more efficient, was a library school, corresponding in thoroughness to the schools that fit men to be doctors, lawyers, and ministers. There are now four such schools, whose graduates are eagerly absorbed by libraries, to say nothing of the summer schools, which give those who can not afford a full course such a smattering of library knowledge as can be acquired in six weeks. Besides this, a number of large libraries take apprentices, from whom their staff is recruited or the neighboring small libraries are supplied.

As a natural result a change has come about in the appointment of librarians. Formerly it was too oiten the man who had failed in the pulpit, the court, the schoolroom, or even the shop, who got the votes of compassionate committees. It is an advance that these votes are often given now to men who have succeeded in some such occupation, with the idea that they will therefore succeed in a library. Nor are these appointments always unfortunate; after all, ability is the main thing; yet they leave something to desire, for though it is true that a man may guide himself by the practice of his predecessors, yet the greatest success does not rise from following precedent, but from knowing when rules can be disregarded and when they can not-a knowledge that comes only from a thorough acquaintance with the subjectmatter. The next step will be for all appointing bodies to require, as many do now, both ability and experience.

Architecture has lagged behind other branches of library practice, partly because the needs of a library have been expanding so fast, partly because libraries have been designed not so much for use by men who had used them and had learned their defects as for show by committees and builders. Bad ventilation is common, bad lighting universal; one hears of libraries without class rooms for the public or working rooms for the staff; they are continually made with no provision for enlargement, though nothing grows more surely than a library's stock of books and number of readers. Some have been built too small even for the books that the library had already. Even for show they have not till very lately reached much success. We have not even found a characteristic style of architecture. Everyone knows a church, a theater, a railroad station when he sees it. One seldom knows a library if it is not labeled. The ordinary library building might be taken for a school, a bank, a courthouse, or a municipal building. Yet the way to a style was plain. A library has one need which should give rise to distinctive features. Its reading rooms, its study, and its working rooms must be very light-much lighter than the rooms of a dwelling house. This necessity ought to show in the design. The stack must not only be light, but must be lighted in a peculiar way, which alone would mark the building as a library by a series of lofty, narrow windows, separated by still narrower columns or sections of wall, a difficult matter to treat without bareness and monotony, yet surely not beyond the capacity of the American architect.

The library building of 1801 was in most cases one room, shelved around the walls. When too many books accumulated for the wall space, they were put into cases projecting from the sides. The evolution of a century has differentiated this single cell into a score of different parts, each with its own function-for work, the packing, accessioning, cataloguing and classifying, binding, printing, mechanics' rooms; for the persomnel, the trustees', librarian's, staif's, janitor's rooms; for the public, the
cloak and hat, toilet, charging, reading, current periodical reading, and standard reading rooms, and sometimes the dining room; for special kinds of stock, the rooms for bound periodicals, manuscripts, maps, patents, public documents; for special classes of users, the study, class, lecture, art rooms, the photographing room (with a developing closet), the music room (with a piano and deadened walls), the room for the blind, and the children's room. All of these are needed in the largest libraries; many of them are already to be found in them; the children's room is needed everywhere. In the smaller libraries, of course, one room plays many parts.

In the first years of the library awakening the most attention was paid, as was natural, to details of management-the length of shelves, the form of the accession book and the binder's schedules, the size of cards and their ruling, to questions of movable or fixed shelves, movable or fixed location, stamping or embossing title pages; in fact, the things which are now taught in the library schools-the a, b, c of the profession. This excited some ridicule, as also was natural. It was called pedantic; people said that too much time was spent in distinguishing tweedledum from tweedledee; that the loss of originality was too high a price to pay for a doubtfully desirable uniformity; that in absorption in mechanical details the things of the spirit would be forgotten. They were right and they were wrong. It was necessary that these questions should be settled before attacking the deeper problems. One must forge one's weapons before one goes into the fight. It is best to be thoroughly familiar with one's tools before one undertakes complicated work. Both dangers that were feared are real, but against them stand American inventiveness, which will not be made to halt at any one stage of achievement, and the missionary spirit, which can never be content with mechanics, but must be saving souls-in the library way. The leaders had no fears, and they were justified. In the last half of the last quarter of the century, great as has been library progress in everything else, the progress in ways of reaching the public has been greater. Go into a modern library, and see the steady stream of books flowing into the hands of every class in the city, their time of waiting reduced to a minimum; see hung up near the delivery desk lists of the best new books, made attractive by pictures and instructive by criticism; at the information desk watch the versatile clerk answering a constant succession of questions about the most diverse subjects, telling one where to look, rescuing another from a fruitless search, explaining the reference books, directing to the shelves, guiding the reading; see in conrenient nooks the portraits of authors whose birthday is at hand, hung over tables covered by their writings and the works about them, or look at other tables spread with the best that the library has on approaching anniversaries, Christmas, Halloween, the discovery of America, at once showing the resources of the library, and suggesting to frequenters to read for some better object than entertainment or novelty; go into the children's room, mark their satisfaction as they cluster round the shelves and discuss their favorite books, or sit absorbed, the older ones in magazines, the younger in picture books; see their friend the attendant helping them, or rather showing them how to help themselves, now and then putting in a word about their choice of books, but obtruding nothing; in a class-room see a school-teacher showing her scholars the books that illustrate their lessons; go into the exhibition room and see the lines of photographs illustrating some great painter, or the architecture and art galleries of some famous city, the dwellings and peasantry of some unknown country, the peaks and glaciers of a great range of mountains; hear in one room a man reading to the blind, in another a musician trying music, in a third see a photographer reproducing manuscript documents; here a clerk is dispatching books borrowed by a distant library for one of its clients, there another is choosing books which are sent once or twice a week to a delivery in an outlying village; an intelligent assistant will go with them and, knowing all the borrowers, will recommend to each the book which will suit him best, gently leading him to better reading-a sort of pastoral care that it is not easy to give in the rush of the
crowded central delivery room; note that this goes on ten or twelve hours every day in the year; that it is free to all; that if formerly libraries were for the learned, now it is certainly to the ignorant that the gospel of learning is given; and then say whether the public library is failing in its duty to the community.
From time to time some one is alarmed at the extension of library activity and cries "panem et circenses." But the circenses, which being interpreted is novels, are so inextricably bound up with the educational work of the library, being the inducement to many io come and betaught, and they are as now written so largely educational themselves, that their supply will stand or fall with the libraries. For the panem, the solid work of the library, whose paying for out of the public pocket seems to certain theorists of dangerous tendency, only to be justified on socialistic grounds, the extremest individualist admits the necessity of combining for the public defense, and it is abundantly clear that general ignorance menaces an attack not merely on the republic but on civilization. Moreover, it is the Anglo-Saxon way-and we are still largely Anglo-Saxon-to make theories after trying experiments. We are at present thoroughly committed to the experiment of universal education. We are hoping to find that it not only imparts information and sharpens intellects, but counteracts temptations and lessens crime, increases the earning power of the individual and the effective force of the nation. Few things can be made certain in sociology, but if after a time the prophylactic power of education appears probable the existence of libraries is justified, for there is no doubt that they are educative. They take up the work where the schools are compelled to lay it down for the majority of the community, and they carry it on through life; they are doing this with greater and greater effect as the schools succeed more and more fully in giving to their pupils their best gift-the power of self-education.

## THE HUGO GROTIUS CELEBRATION AT DELFT, JULY 4, 1899. ${ }^{1}$

By T. J. McCormack.

The appearance of the report of the Peace Conference at The Hague in 1899 by its secretary, Mr. Frederick W. Holls, a member of the conference from the United States of America, recalls vividly to mind a notable festive ceremony which took place during the meeting of the conference and which lent a graceful historic sanction and significance to its proceedings. This was the festival in honor of the great Dutch jurist, scholar, poet, and statesman, Hugo Grotius (1583-1645), given on the day of our greatest and most sacred national holiday, the Fourth of July, in the historic church at Delft, as a tribute from the American people to the Dutch, in recognition of the many elements of our national greatness which we have derived from them and of the many reasons for which we owe them gratitude.

The Dutch are closely connected with America by historical traditions. It was Hollanders that first settled on the banks of the Hudson (1609) and that founded the city of New Amsterdam (1614), now New York, and it was they who formed the backbone of our Revolutionary resistance in the Fudson River region. From DelftHaven sailed the Mayflower bearing the Pilgrim Fathers who brought to Anerica the principles of toleration which had grown up in them during their stay in the Netherlands, and of which Grotius was an apostle. From Leyden through Deift-Haven and Plymouth Rock, and again through New Amsterdam, came the free public school. The Province of Friesland gave to our independence its first formal recognition, and it was a Dutch captain that first saluted the Stars and Stripes. Moreover, the United

[^25]States of America took their name from the United States of the Netherlands. Said the honorable Seth Low, the American Commissioner upon whom devolved the task of thanking the city of Delft for the hospitality accorded to the assembled guests: "We have learned from you not only that 'In union there is strength' -that is an old lesson-but also, in large measure, how to make 'One out of many.' From you we have learned, what we, at least value, to separate church and state; and from you we gather inspiration at all times in our devotion to learning, to religious liberty, and to individual and national freedom."

The festival.-The merit of having inaugurated this distinctively American festival in honor of the great Dutch jurist, which the preceding considerations show to have been peculiarly appropriate, was due to the Hon. Andrew D. White, chairman of the Commission of the United States, our present ambassador to Germany, ex-president of Cornell University, and a historical scholar and publicist of wide erudition and culture. His commemorative address was delivered in the apse of the Grote Kerk of Delft, in front of the tomb of Grotius, and near that of William the Silent, before all the members of the peace conference, and all the members of the Dutch Government and the diplomatic corps accredited to The Hague, the deans of the law faculties of the universities of Leyden, Utrecht, Amsterdam, Gröningen, the burgomaster and city authorities of Delft, and other distinguished visitors. The services were varied and elegant in character, embracing classical musical selections, magnificently rendered, and several minor addresses. M. Jonkeer van Karnebeek, the Netherlands delegate, presided. M. de Beaufort, the Dutch minister of foreign affairs, thanked the Government of the United States for honoring his countryman; M. Asser, president of the Institute of International Law, spoke of the contributions made by American statesmen to the development of the principles of international arbitration, and the Hon. Seth Low briefly and appropriately thanked all the persons whose kindness had made the occasion possible. At the conclusion of his formal address Ambassador White deposited on the tomb of Grotius an exquisitely designed and permanent silver wreath bearing the inscription: "To the memory of Hugo Grotius in reverence and gratitude from the United States of America on the occasion of the International Peace Conference of The Hague, July 4, 1899." M. de Beaufort, the Dutch minister of foreign affairs, then said:

For the purpose of acknowledging the great merits of Grotius, a wreath has been placed, by order of the American Government, on his tomb. I sincerely hope that this fine and precious work of art will remain forever on the place where it is now fixed. May the numerous visitors to this church look on it with a sentiment of gratitude and admiration. May it act as a stimulus for future generations in their exertions in behali of still further reforms in the practice of international law, and, last not least, may this wreath be an everlasting emblem of the friendly relations between America and Holland, and a guaranty of the unbroken continuance of that historical friendship of which America gives us on this memorable day such a splendid and highly valued testimony.

Life and work of Grotius.-Hugo Grotius was one of the most famed men of the seventeenth century, and, like his illustrious countryman Erasmus, was noted for the diversity of his accomplishments and his comprehensive literary power. He is one of the greatest prodigies in the annals of precocious genius, was a pupil of the celebrated Scaliger, and at an early age rose to the highest rank in his profession of the law, in historical writing, and as a statesman. Becoming involved in the warfare of the theological factions in Holland (the Arminians and Gomarists), he was imprisoned by Prince Maurice, in 1619, at the Fortress of Lovestein, from which he escaped later, through the ingenuity of his wife, in a chest supposed to contain books and old linen. He proceeded then to France, where he wrote and published (1625) his immortal work De Jure Belli ac Pacis, which is the foundation of his fame.
Says Mr. Pattison in the Encyclopædia Britannica:
Grotius's work, though not by any means the first attempt in modern times to ascertain the principles of jurisprudence, went far more fundamentally into the
discussion than anyone had done before him. The title of the work was so far misleading that the jus belli was a very small part of his comprehensive scheme. In his treatment of this narrower question he had the works of Albericus Gentilis (1588) and Ayala (1597) before him, and has acknowledged his obligations to them. But it is in the larger questions to which he opened the way that the merit of Grotius consists. His was the first attempt to obtain a principle of right, and a basis for society and government, outside the Church or the Bible. The distinction between religion on the one hand and law and morality on the other is not indeed clearly conceived by Grotius, but he wrestles with it in such a way as to make it easy for those who followed him to seize it. The law of nature is unalterable; God Himself can not alter it any more than He can alter a mathematical axiom. This law has its source in the nature of man as a social being; it would be valid even were there no God, or if God did not interfere in the government of the world. These positions, though Grotius's religious temper did not allow him to rely unreservedly upon them, yet, even in the partial application they find in his book, entitle him to the honor of being held the founder of the modern science of the law of nature and nations.

## And to quote a famous authority in political science, Bluntschli:

The elegance of his diction, the pearls from classical antiquity with which he adorned his pages, the temper of humanity which pervaded his argument, his effort to mitigate the horrors of the thirty years' war in the midst of which he wrote, and the warmth of his general sympathy for a moral as opposed to a material order, enlisted men's hearts on the side of his reasoning, while the deficiencies of his doctrine were not as yet detected.

Ambassador White's eulogy of Grotius.-Ambassador White spoke at length and authoritatively of Grotius's life and work from the standpoint of an American, and we give below the principal passages of his address. After referring to the predecessors of Grotius and to the unorganized state of prior opinion in public law, he said:

Grotius's great mind brooded over that earlier chaos of opinion, and from his heart and brain, more than from those of any other, came a revelation to the modern world of new and better paths toward mercy and peace. But his agency was more than that. His coming was like the rising of the sun out of the primeval abyss-his work was both creative and illuminative. We may reverently insist that, in the domain of international law, Grotius said, "Let there be light," and there was light.

The light he thus gave has blessed the earth for these three centuries past, and it will go on through many centuries to come, illuminating them ever more and more.

I need hardly remind you that it was mainly unheeded at first. Catholics and Protestants alike failed to recognize it; "The light shone in the darkness, and the darkness comprehended it not." By Calvinists in Holland and France and by Lutherans in Germany his great work was disregarded if not opposed; and at Rome it was placed on the index of books forbidden to be read by Christians.

The book, as you know, was published amid the horrors of the thirty years' war. The great Gustavus is said to have carried it with him always, and he evidently at all times bore its principles in his heart. But he alone among all the great commanders of his time stood for mercy. All the cogent arguments of Grotius could not prevent the fearful destruction of Magdeburg, or diminish, so far as we can now see, any of the atrocities of that fearful period.

Grotius himself may well have been discouraged; he may well have repeated the words attributed to the great Swedish chancellor, whose ambassador he afterwards became, "Go forth, my son, and see with how little wisdom the world is governed." He may well have despaired as he reflected that throughout his whole life he had never known his native land save in perpetual, heartrending war; nay, he may well have been excused for thinking that all his work for humanity had been in vain, when there came to his deathbed no sign of any ending of the terrible war of thirty years. * * *

Yet we see that the great light streaming from his heart and mind continued to shine; that it developed and fructified human thought; that it warmed into life new and glorious growths of right reasons as to international relations; and we recognize the fact that, from his day to ours, the progress of reason in theory, and of mercy in practice, has been constant on both sides of the Atlantic.

Referring to the deficiencies of Grotius's ideas from the present point of view, Mr. White continues:

It has also been urged that the system which Grotius gave to the world has been utterly left behind as the world has gone on; that the great writers on international

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law in the present day do not accept it; that Grotius developed ererything out of an idea of natural law which was merely the creation of his own mind and based everything on an origin of jural rights and duties which never had any real being; that he deduced his principles from a divinely planted instinct which many thinkers are now persuaded never existed, acting in a way contrary to everything revealed by modern discoveries in the realm of history.

It is at the same time insisted against Grotius that he did not give sufficient recognition to the main basis of the work of modern international jurists; to positive law, slowly built on the principles and practice of various nations in accordance with their definite agreements and adjustments.

In these charges there is certainly truth; but I trust that you will allow one from a distant country to venture an opinion that, so far from being to the discredit of Grotius, this fact is to his eternal honor.

For there was not and there could not be at that period anything like a body of positive international law adequate to the new time. The spirit which most thoroughly permeated the whole world, whether in war or peace, when Grotius wrote, was the spirit of Machiavelli unmoral-immoral. It had been dominant for more than a hundred years. To measure the service rendered by the theory of Grotius, we have only to compare Machiarelli's Prince with Grotius's De Jure Belli ac Pacis. Grant that Grotius's basis of international law was, in the main, a theory of natural law which is no longer held; grant that he made no sufficient recognition of positive law; we must nevertheless acknowledge that this system, at the time he presented it, was the only one which could ennoble men's theories or reform their practice.

From his own conception of the attitude of the Divine Mind toward all the falsities of his time grew a theory of international morals which supplanted the principles of Machiavelli; from his conception of the attitude of the Divine Mind toward all the cruelties which he had himself known in the seventy years' war of the Netherlands, and toward all those of which tidings were constantly coming from the German thirty years' war, came inspiration to promote a better practice in war.

To one, then, looking at Grotius from afar, as doubtless to many among yourselves, the theory which Grotius adopted seems the only one which, in his time, could bring any results for good to mankind.

Ambassador White then proceeds to more technical points:
It has * * * been urged against Grotius that his interpretation of the words "jus gentium" was a mistake, and that other mistakes have flowed from this. Grant it; yet we, at a distance, believe that we see in it one of the happiest mistakes ever made; a mistake comparable in its fortunate results to that made by Columbus when he interpreted a statement in our sacred books regarding the extent of the sea as compared with the land, to indicate that the Western Continent could not be far from Spain-a mistake which probably more than anything else encouraged him to sail for the New World.

It is also not unfrequently urged by eminent European writers that Grotius dwelt too little on what international law really was, and too much on what, in his opinion, it ought to be. This is but another form of an argument against him already stated. But is it certain after all that Grotius was so far wrong in this as some excellent jurists have thought him? May it not be that, in the not distant future, international law, while mainly basing its doctrines upon what nations have slowly developed in practice, may also draw inspiration, more and more, from "that power in the universe not ourselves, which makes for righteousness."

An American, recalling that greatest of all arbitrations yet known, the Geneva Arbitration of 1872, naturally attributes force to the reasoning of Grotius. The heavy damages which the United States asked at that time and which Great Britain honorably paid were justified mainly, if not wholly, not on the practice of nations then existing, but upon what it was claimed ought to be the practice; not upon positive law, but upon natural justice; and that decision forms one of the happiest landmarks in modern times; it ended all quarrel between the two nations concerned, and bound them together inore firmly than ever.

Finally Ambassador White casts his glance into the deep abyss of the past, and his historical clairvoyance enables him to see the consummation of Grotius's ideals in the great peace conference he was at the time attending. His imagination conjures up the spectacle of the shade of William the Silent looking down with approval upon Holland's great son, and he says:

May not that great and glorious spirit have also looked lovingly upon Grotius as a boy, lingering on this spot where we now stand, and recognized him as one whose
work was to go on adding in every age new glory to the nation which the mighty Prince of the House of Orange had, by the blessing of God, founded and saved; may not, indeed, that great mind have foreseen, in that divine light, another glory not then known to mortal ken? Who shall say that in the effluence of divine knowledge he may not have beheld Grotius, in his full manhood, penning the pregnant words of the De Jure Belli ac Pacis, and that he may not have foreseen-as largely resulting from it-what we behold to-day, as an honor to the august monarch who convoked it, to the Netherlands who have given it splendid hospitality, and to all modern States here represented, the first conference of the entire world ever held; and that conference assembled to increase the securities for peace and to diminish the horrors of war.

For, my honored colleagues of the peace conference, the germ of this work in which we are all so earnestly engaged lies in a single sentence of Grotius's great book. Others, indeed, had proposed plans for the peaceful settlement of differences between nations, and the world remembers them with honor. To all of them, from Henry IV and Kant and St. Pierre and Penn and Bentham, down to the humblest writer in favor of peace, we may well feel grateful, but the germ of arbitration was planted in modern thought when Grotius, urging arbitration and mediation as preventing war, wrote these solemn words in the De Jure Belli ac Pacis: "Maxime autem christiani reges et civitates tenentur hanc inire viam ad arma vitanda."

My honored colleagues and friends, more than once I have come as a pilgrim to this sacred shrine. In my young manhood, more than thirty years ago, and at various times since, I have sat here and reflected upon what these mighty men here entombed have done for the world, and what, though dead, they yet speak to mankind. I seem to hear them still.

From this tomb of William the Silent comes, in this hour, a voice bidding the peace conference be brave and true and trustful in that power in the universe which works for righteousness.

From this tomb of Grotius I seem to hear a voice which says to us as the delegates of the nations: "Go on with your mighty work; avoid, as you would avoid the germs of pestilence, those exhalations of international hatred which take shape in monstrous fallacies and morbid fictions regarding alleged antagonistic interests. Guard well the treasures of civilization with which each of you is intrusted, but bear in mind that you hold a mandate from humanity. Go on with your work. Pseudophilosophers will prophesy malignantly against you; pessimists will langh you to scorn; cynies will sneer at you; zealots will abuse you for what you have not done; sublimely unpractical thinkers will revile you for what you have done; ephemeral critics will ridicule you as dupes; enthusiasts, blind to the difficulties in your path and to everything outside their little circumscribed fields, will denounce you as traitors to humanity. Heed them not; go on with your work. Heed not the clamor of zealots, or cynics, or pessimists, or pseudo-philosophers, or enthusiasts, or faultfinders. Go on with the work of strengthening peace and humanizing war; give greater scope and strength to provisions which will make war less cruel; perfect those laws of war which diminish the inmerited sufferings of populations; and, above all, give to the world at least a beginning of an effective, practicable scheme of arbitration."

These are the words which an American seems to hear issuing from this shrine to-day, and I seem also to hear from it a prophecy. I'seem to hear Grotius saying to us: "Fear neither opposition nor detraction. As my own book, which grew out of the horrors of the wars of seventy and the thirty years' war, contained the germ from which your great conference has grown, so your work, which is demanded by a world bent almost to breaking under the weight of ever-increasing armaments, shall be a germ from which future conferences shall evolve plans ever fuller, better, and nobler." And I also seem to hear a message from him to the jurists of the great universities who honor us with their presence to-day, including especially that renowned university of Leyden which gave to Grotius his first knowledge of the law, and that eminent university of Königsberg which gave him his most philosophical disciple; to all of these I seem to hear him say: "Go on in your labor to search out the facts and to develop the principles which shall enable future conferences to build more and more broadly, more and more loftily for peace."

# WHEN AND WHY PUPILS LEAVE SCHOOL-HOW TO PROMOTE ATTENDANCE IN THE HIGHER GRADES. ${ }^{1}$ 

From the report of Calvin M. Woodward, president of the St. Louis board of education, to the people of the city of St. Louis, November 30, 1900.

SCHOOL ATTENDANCE.
The enrollment in the day schools during the year 1899-1900 was 78,263. * * * The distribution of these 78,263 children through different ages and different grades is a matter of great interest, as it shows how long the pupils remain in school and when and where they disappear; that is to say, it shows where the public schools come up to a high standard of efficiency in that they retain their full quota of school children from year to year; and again it shows where, by reason of the premature withdrawal of pupils, the schools are depleted, and hence fail in one essential respect, viz, that of securing the persistent attendance of pupils.

- The following table gives the numbers for each year of age, from 8 to 16, inclusive, for the three years $1897-1900$, separately. They are taken from the superintendent's report, ${ }^{2}$ which contains the numbers for all ages and grades:

School attendance for different ages. ${ }^{3}$

| Schọol years. |  |  |
| :---: | :---: | :---: |
| 1897-98. | 1898-99. | 1899-1900. |
|  |  | $\begin{gathered} 8 \text { years old, } \\ 9,778 . \end{gathered}$ |
|  | $\begin{gathered} 8 \text { years old. } \\ 9,989 . \end{gathered}$ | $\begin{gathered} 9 \text { years old, } \\ 9,431 . \end{gathered}$ |
| $\begin{gathered} 8 \text { years old, } \\ 9,728 . \end{gathered}$ | $\begin{gathered} 9 \text { years old, } \\ 9,128 . \end{gathered}$ <br> (600) | $\begin{aligned} & 10 \text { years old, } \\ & 8,712 . \end{aligned}$ <br> (416) |
| $\begin{aligned} & 9 \text { years old, } \\ & 8,672 . \end{aligned}$ | $\begin{aligned} & 10 \text { years old, } \\ & 8,339 . \end{aligned}$ <br> (333) | $\begin{aligned} & 11 \text { years old, } \\ & 7,769 \text {. } \end{aligned}$ |
| $\begin{gathered} 10 \text { years old, } \\ 8,003 . \end{gathered}$ | $11 \text { years old, }$ | $12 \text { years old, }$ <br> (215) |
| $\begin{aligned} & 11 \text { years old, } \\ & 7,324 . \end{aligned}$ | $\begin{aligned} & 12 \text { years old, } \\ & 7,073 \text {. } \end{aligned}$ <br> (251) | $13 \text { years old, }$ <br> (1123) |
| $\begin{aligned} & 12 \text { years old, } \\ & 6,923 . \end{aligned}$ | $13 \underset{\substack{\text { years old, } \\ 5,794}}{ }$ <br> (1129) | $\begin{aligned} & 14 \text { years old, } \\ & 4,080 . \end{aligned}$ |

${ }^{1}$ See in this connection an article by Professor Woodward entitled "At what age do pupils withdraw from the public schools?" Rep. Com'r Ed. 1894-95, Vol. 2, Chap. XXIV.
${ }^{2}$ I have omitted the number of children 6 and 7 years old for two reasons: (1) There is no discussion about the "withdrawal" of such young children; (2) the number reported as " 7 years old" is abnormally large. This abnormal showing is due probably to the fact that children under that age are prematurely "smuggled" into the kindergarten, and then at the end of the year, again are "smugg!ed" into the first grade, where they are reported as 7 years old for rather more than a year, that is, till they are really 8 . A careful examination of the reports shows that about 1,000 such cases of smuggling occur every year. As a certain age is required only for admission to the kindergarten and to the first grade, there is no motive for continuing the deception beyond the seventh year.
${ }^{3}$ The actual age of those who are reported as 8 is on the average $8 \frac{1}{4}$, since in every case the months in excess of 8 years are omitted, and naturally the months would vary from 0 to 12. A similar remark applies to all other ages. For the purposes of this discussion, it is simpler to give the whole years.

School atiendance for different ages-Continued.

| School years. |  |  |
| :---: | :---: | :---: |
| 1897-98. | 1898-99. | 1899-1900. |
| $\begin{aligned} & 13 \text { years old, } \\ & 5,927 . \end{aligned}$ | $\begin{aligned} & 14 \text { years old, } \\ & 3,977 . \\ & (1950) \end{aligned}$ | $\begin{gathered} 15 \text { years old, } \\ 2,504 . \end{gathered}$ <br> (1473) |
| $\begin{gathered} 14 \text { years old, } \\ 4,032 . \end{gathered}$ | $\begin{gathered} 15 \text { years old, } \\ 2,302 . \end{gathered}$ <br> (1730) | $\begin{gathered} 16 \text { years old, } \\ 1,784 . \end{gathered}$ <br> (518) |
| $\begin{aligned} & 15 \text { years oid, } \\ & 2,516 . \end{aligned}$ | $\begin{aligned} & 16 \text { years old, } \\ & \mathbf{1}, 656 . \end{aligned}$ |  |
| $\begin{aligned} & 16 \text { years old, } \\ & 1,776 \text {. } \end{aligned}$ |  |  |

It will be seen from the table that the number of children in school last year who were 14 years old was 4,080 , very nearly the same as for the year 1898-99, when it was 3,977, and again for 1897-98, when it was 4,032. For other ages also the numbers do not vary much from year to year. But the numbers in each column diminish rapidly after we pass the children who are 12 years old. This suggests a great falling out of school, but as those 13 years old are different children from those who are 12 in the same column, and those who are 14 and older are still different, there is some uncertainty as to the number and ages of those who actually drop out.

If, however, we read across the table, we shall follow the same children from year to year. Take, for instance, the 7,324 children who were 11 years old in 1897-98. They were the only children who could be 12 years old in 1898-99, and the only ones who could be 13 years old in 1899-1900. The figures in parentheses show how many dropped out of school during the year. Of the $7,32 \pm 11$-year-olds in 1898, 7,073 appear next year as 12 -year-olds; hence the loss was $2 \tilde{5} 1$, which is not a large proportion. But in 1900, when they are 13 years old, they number only 5,950 ; this shows a loss during the year of $1,123,{ }^{1}$ which is heavy.
Next let us take those who were 12, 13, and 14 years old in 1897-98 and see what has become of them. Their numbers aggregated 16,882 in 1897-98. In 1898-99 they were of course 13,14 , and 15 years old, and they numbered 12,073. In 1899-1900 they were 14,15 , and 16 years old, and they aggregated only 8,368 . Here is a loss in two years of 8,514 children out of 16,882 , with an average age of 14 years. The table yields other results equally interesting.

## ATTENDANCE BY GRADES.

Let us now look at other reports of the superintendent, and see from what grades these pupils drop out of school.

The following diagrams constructed from data furnished by Superintendent Soldan show the "number in actual attendance" in each grade in November in the years 1899 and 1900. On the vertical lines are the numbers in the several grades. The Roman numbers at the top of each diagram give the different grades of the district schools and the classes in the high schools. I give two diagrams in order to exhibit

[^26]the great similarity in the attendance of different years, which is such that a single diagram may be taken to represent the attendance of the same group of children through the course.


Attendance by grades, November, 1899.


Attendance by grades, November, 1900.
A glance at either the figures or the bounding curves will show that there is a vast falling off at the end of the fourth grade and again at the end of the fifth grade. In one case, of the 9,249 children who were enrolled in the fourth grade, only 3,045 appear in the sixth. In the other case, 9,134 fell to 3,012 . In each case more than two-thirds disappeared.

These figures answer the question I asked above as to the grades from which the greater number of children drop out. The answer is: From the fourth and fifth grades. From the sixth grade forward the percentage of loss is somewhat less, but it is still much too great.

To more definitely locate the loss, let us compare the fourth grade of 1899 with the fifth grade of 1900. The figures are taken from the superintendent's reports:

Ages of pupils in the fourth and fifth grades.

| Fourth grade in 1899. | Fifth grade in 1900. | Loss. |
| :---: | :---: | :---: |
|  |  | $\begin{array}{r} 7 \\ 238 \\ 841 \\ 972 \\ 673 \\ 549 \\ 193 \\ 80 \\ 13 \\ 5 \\ 1 \end{array}$ |
| Totals, 9,249 | 5,677 | 3,572 |

The loss is distributed over all the ages, but the percentage of loss is highest among the oldest pupils.

The "normal age" is the age of a child who enters the kindergarten at 6 , enters the first grade at 7 , and accomplishes a grade every year, reaching the fourth grar'e when 10 years old and the fifth when 11.

If now we take the fifth grade of 1899 and see how it shows up in the sixth grade a year later, we have the following table:

Ages of pupils in the fifth and sixth grades.

| Fifth grade in 1899. | Sixth grade in 1900. | Loss. |
| :---: | :---: | :---: |
|  |  | $\begin{array}{r} 0 \\ 24 \\ 327 \\ 590 \\ 530 \\ 392 \\ 103 \\ 31 \\ 2 \\ 2 \end{array}$ |
| Totals, 5, 013 | 3,012 | 2, 001 |

Here the loss is very largely among the older pupils.
The amount of the loss shown in these two tables is appalling. In spite of free schools in comfortable and attractive buildings, in spite of skillful teachers and expert supervision, nearly 6,000 of our boys and girls every year stop going to school with the district-school course of study only about half finished. This is a sad state of things, yet it should be known to every citizen of St. Louis that every year a vast army of public-school boys and girls, who are 13 and 14 and 15 years old, in the middle of the district-school course, for one reason or another, stop going to school. These facts have much the nature of a public calamity, and it is the solemn duty of those in responsible charge of the schools to point out as clearly as possible the probable causes and the most practicable remedies. I am convinced that the causes are in a large measure preventable, and that the remedies are in our hands, as I shall soon show.

I will here insert some additional attendance tables and diagrams which are full of suggestions to the people of St. Louis. They serve to confirm what has been said in
regard to the attendance upon our schools, and by contrast with the attendance elsewhere they lead us to the discovery of not only our partial failure, but its causes and remedies. The figures in the table give the numbers in attendance in the third and higher grades out of 100 children who were regularly enrolled in the second grade. ${ }^{1}$ In other words, they show the "persistence" through the grades and high schools of pupils who numbered 100 in the second grade.

Comparative attendance, St. Louis, Chicago, and Boston.

|  | Grammar grades. |  |  |  |  |  |  | High schools. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | II. | III. | IV. | V. | VI. | VII. | VIII. | First year. | Second year. | Third year. | Fourth year. |
| St. Louis, years, 1879-1881. | 100 | 67 | 63 | 44 | 20 | 9 | 8 | 5 | 3 | 2 | 2 |
| St. Louis, years, 1887-1890.. | 100 | 67 | 55 | 28 | 20 | 12 | 10 | 5 | 3 | 2 | 2 |
| St. Louis, years, 1898-1900.. | 100 | 93 | 83 | 50 | 29 | 21 | 14 | 7 | 4 | 3 | 2 |
| Chicago, years, 1898-1900 .- | 100 | 91 | 78 | 71 | 52 | 37 | 26 | 12 | 7 | 5 | 3 |
| Boston, years, 1898-1900 ... | 100 | 97 | 91 | 85 | 74 | 59 | 44 | 25 | 15 | 10 | 4 |



The first line of the table gives the average persistence deduced from two St. Louis reports made twenty years ago.

The second line gives the average persistence for the three years just preceding the partial introduction of free text-books in St. Louis in 1890.

[^27]The third line gives the "persistence" in St. Louis schools to-day made from the average for the last two years.

The fourth and fifth lines give similar figures for Chicago and Boston public schools, taken from their last two reports. All these figures have been checked in the superintendent's office.

The first line in the table is represented by the plain fine line (- - ), ABZ in the diagram. The distance of that line from the base line OM shows the degree of persistent attendance of St. Louis children twenty-one years ago.

The hatched line (-|-|-|-|-|-|-|-|-|), ACZ, represents the persistent attendance of St. Louis children ten years ago.
The double line ( $=$ ), ADZ, represents the persistent attendance of St. Louis public-school children at the present time.
The dotted line ( - - - ) , AEZ, represents the persistent attendance of Chicago public-school children at the present time.

The line (-o-o-), AFZ, represents the persistent attendance of Boston publicschool children at the present time.

Both the table and the drawings prove what has been proved before, viz, that Chicago children stay longer in school and get more education than do St. Louis children; and that Boston children stay still longer, and get still more.

Not only do I thus compare the work we are doing with what is done in the foremost of American cities, but I compare what we are doing to-day with what was done in St. Louis ten and twenty years ago.

The above is an exceedingly interesting and valuable exhibit. It shows at a glance just where St. Louis stands, both as regards its former records and as compared with the highest standards.

We can point with pride to our kindergartens and to the quantity and quality of the work done in our primary grades. We have reason also to be well satisfied with the quality of our workmanship in the upper grades; it is only in regard to the quantity that we are disappointed. Hence, while this exhibit wounds our pride, it is not wanting in suggestion and encouragement. It is gratifying to note that measures adopted by the board of education have had a marked influence in improving the attendance. The darkiy tinted area between ACZ and ADZ shows the remarkable progress we have made since 1890. It shows that our pupils remain much more generally through the third and fourth grades than formerly, and that there is some improvement in all the grammar grades.

Our attendance up to the fifth grade is rather better than that in Chicago. Had we a truancy law, as they have in Massachusette, I believe our showing up to the fifth grade would be as good as that of Boston. While Chicago falls behind us in the third and fourth grades, she distances us in all the higher grades. Boston beats us at every point, and from the sixth grade to the third year of the high schools she beats us three to one. ${ }^{1}$

This exhibit has nothing to do with those who never come to the public schools; neither has it anything to do with the size of cities or the total numbers who enroll in the second grades. My figures and diagrams merely show the extent of school attendance on the part of the children who enroll as pupils, be their original number large or small.

Let me hasten to say that I do not think this partial failure reflects upon our teachers or our superintendent and his assistants.

Does, then, the responsibility rest upon the board of education and upon former school boards? In a measure it does, as it does upon parents and the fathers of the Commonwealth. Certainly it is the duty of the board to see to it that the city does not suffer through ignorance of what means and appliances are requisite and adequate

[^28]for the proper education of the children of the city. The main object of this discussion is to show where the work of our schools seems to fail of the best results, to point out some of the potent reasons for the failure, and to suggest definite and reasonable remedies.

I think I have effectually accomplished the irst part of my task. I have shown that, while our children persist in their attendance in a very satisfactory way up to and through the fourth grade, they then drop out and disappear to such a degree that it is a public calamity, since the inevitable result is too little education and a comparatively low grade of public intelligence.

THE CAUSES OF THE SMALL ATTENDANCE IN THE HIGHER GRADES.
It is not so easy to point out the canses definitely and certainly. Individuals act from mixed motives, and when one comes to account for a popular movement the complexity of motives often baffles all analysis. However, in the present case, it is easy to eliminate some readily suggested causes and to establish the potency of others. No attempt will be made to give all the causes or to explain all the phenomena of school attendance, either in St. Louis or elsewhere.

The most common excuse given for dropping out of school is that of poverty. Some parents consider themselves too poor to buy books and maintain the child, or that the child's earnings are needed to help the family. I do not believe that St. Louis suffers more from this cause than other cities. Poverty is a cause to a certain extent in all cities, but the striking differences shown between St. Louis and other cities are not to be accounted for on the basis of poverty. I doubt if the patrons of the public schools in this city are financially or socially inferior to the patrons of the public schools of Boston. My discussion of the attendance reports has shown that the bulk of the withdrawals are from the two grades, the fifth and sixth, and that the pupils who withdraw are, as a rule, much older than those who remain. It goes without saying that such pupils are backward in their studies, the reason for which may be sickness or slowness or lack of interest. Certainly the older pupils, the retarded pupils, the discontented pupils, do not withdraw on account of poverty. If abundant means on the one side and penury on the other have any influence on the character, scholarship, and ambition of children in our schools, it is not seen in unusual diligence and ability produced by the former, nor in idleness, inability, and lack of zeal produced by the latter. I suspect the excuse of poverty is often made a cover for criminal neglect on the part of a parent or a feeling of discontent on the part of the child.

I reject all suggestions which base our slim attendance in the higher grades upon poor teaching, unwholesome schoolrooms, or the rivalry of private schools. The high quality of our teaching corps is everywhere recognized; our schoolrooms are bright, comfortable, and well ventilated; our private schools are not at all unusual for cities of the first class. Whatever their quality, the number of their pupils is very small in comparison to the army of withdrawals. When the truants are found, they are not at school anywhere-they are in factories, department stores, " helping at home," or on the street.

It is not necessary to deny that there is any lack of mental capacity on the part of our youth; they are not forced out of school because they are dull or slow. St. Louis boys and girls are as bright and alert as the best.

There is a reasonable loss from the higher grades in every city. There is a certain death rate, a certain amount of pinching poverty, and a certain amount of incapacity which practically shuts out pupils. I an not complaining of such losses.

My deliberate conclusion, after a careful study of the matter, is that the prime causes for the abnormal withdrawals are: First, a lack of interest on the part of the pupils; and secondly, a lack on the part of parents of a just appreciation of the education now offered, and a dissatisfaction that we do not offer instruction and training of a more practical character.

The pupils become tired of the work they have in hand, and they see in the grades above them no sufficiently attractive features to invite them. They become discontented and neglectful; failure follows, they get behind, and then they stop.

As for the boys from 12 to 15 years old, their discontent is not unnatural. They are conscious of growing powers, passions, and tastes which the school does not recognize. They find the restraints of the school room and grounds very irksome. Many of the things they are required to do seem petty and trivial, and frequent repetitions make them intolerable. Their controlling interests are not in committing to memory the printed page; not even the arithmetic serves to reconcile them to school hours and school duties. They long to grasp things with their own hands; they burn to test the strength of materials and the magnitude of forces; to match their cunning with the cunning of nature and of practical men. This applies to girls as well as boys. Such boys and girls may be saved to school, to the community, and to themselves, by manual training and domestic science and art in their school curriculum, and by the offer of a high-school training suited to their tastes and situated conveniently near. This is the conclusion of careful observers of educational progress the country through.

The dissatisfaction of parents springs from several sources. A parent counts the cost of the books he must buy from the time his child enters the fifth grade. This brings in the question of "free books," which I shall discuss later on. The discontent of the boy or girl contributes to the feeling that the cost of books and the loss of a child's labor are too great a price to pay for what the child is getting. As for going to the high school, it seems to the parent to be out of the question. The school is too far off, too costly in books, in dress, and car fare, and not sufficiently practical in its course of study. Now, since there appears to be no chance of the child's going to the high school, there is no need for him to complete the grammar grades; so out drops the child with the consent of the parents. This is the history of thousands of cases that occur every year.

Of course, it is easy to see that the above reasoning upon the part of the parent is faulty; but it is equally easy to see that it is not altogether without justification. A parent is entitled to the feeling that his child is sufficiently interested in school work to make fair progress, and that the training given is suited to his prospective needs, and that it is worth all it costs.

Undoubtedly the immediate cause of a great falling off in the attendance at the end of the fourth grade is due to the necessity of buying text-books, since "free books" are not supplied beyond the fourth grade. I call attention again to the diagrams on page 1369. The improvement observed in the curve for 1900 over the curve for 1890 is largely, if not chiefly, due to the free books supplied to the primary grades.

THE INFLUENCE OF FREE BOOKS.
Originally I was opposed to free books, for the reason that the board could not afford the expense-that is, I thought the money the books would cost could be spent to greater advantage in other ways. But wise or unwise, the policy of free books has been adopted, and the favorable effect upon attendance can not be gainsaid. The attendance has improved (as shown by the shaded area) in all the grammar grades; but the improvement is remarkable only in the second, third, and fourth. In Chicago they have no free books. Boston has free books in all the grades.

It is possible that our plan of free books for the primary grades only has sometimes an unfortunate and misleading effect upon parents. In point of fact, text-books are very cheap, and the board delivers them to patrons at cost, yet to a parent accustomed to the idea of "free schools" and "free books" the demand for money with which to buy a full set of books in the fifth grade seems an imposition, and it irritates and antagonizes him. He makes haste to claim that he is too poor to buy the books, and he delays sending the money till the child is shamed into dropping out of school, and the evil is done.

It is possible that our present plan gives the impression that we do not count upon the further attendance of the great mass of children. The board seems to sanction the idea that on the completion of the fourth grade the "plain people" have had schooling enough; so the children are withdrawn and put to work as a matter of course. Parents appear to have accepted the end of the free-book period as the goal for which a workingman's child should strive, and they have agreed that having reached that point the pupil should withdraw.

This practice must be broken up if it is possible to break it. Text-books must be "free," at least till the high school is reached-perhaps through the high school, as is done in every city in Massachusetts. This would have a very beneficial effect upon the " persistence" in the higher grades.

## ST. LOUIS LACKS MODERN FEATURES IN THE HIGHER GRADES.

I have yet to account for the striking way in which both Chicago and Boston beat us after the fourth grade. Of a hundred children who were together in the second grade, Boston shows 85 in the fifth grade; Chicago shows 71; St. Louis, 49.

In the sixth grade Boston shows 75; Chicago, 52; St. Louis, 29.
In the eighth grade Boston shows 44; Chicago, 26; St. Louis, 14.
What are the attractions and inducements to persistent attendance in other cities which the St. Louis public schools lack? This question is easily answered.

Of course, there is a sentiment in both cities, more especially in Boston, in favor of education; but it is that sentiment that I am to explain.

In the first place, in all the higher grammar grades in those cities the course of study is enriched by the introduction of manual training and domestic science. These departments have been well established, and their wholesome, attractive nature is well understood and counted upon. In the second place, the most potent factors in their influence on the attendance in the higher grammar grades are the numerous and well-appointed high schools scattered through each city. Boston has 11 and Chicago has 15; each has a manual-training school for boys that is overcrowded, and each is planning for more. Every pupil in the lower grades in those cities can look forward from attractive work to still more attractive work in a neighboring high school. Kansas City has nearly doubled its high-school attendance by the establishment of a manual-training high school for boys and girls.

That St. Louis has for white children but a single high school, the same as she had twenty years ago, is a fact at which all the world except St. Louis marvels exceedingly. I repeat, the great mass of people in this city seem to have settled down to a confirmed habit of letting their children stop in the middle of the district-school course. To stop this practice the board of education, the teachers, and all the friends of public education should bend all their energies. All obstacles to continuance in school should be removed, and all reasonable allurements should be held out to induce a new habit, viz, that of completing the entire public-school course.

## REMEDIES PROPOSED.

To have pointed out the causes of the insufficient attendance in our higher grades is almost to have suggested the remedies: (1) Free books must be furnished through all grades of the district schools; (2) the course of study in the higher grammar grades in every school must be enriched by manual-training and domestic science; (3) a system of high schools, including manual-training schools, must be established. These three remedies would, in my judgment, lift St. Louis to a position on the highest plane.

In a very modest way the work in manual training and domestic science has been begun by the board of education. The larger part of the pupils in the last two grades of the district schools are given weekly lessons and practice in manual training; the boys in drafting and the elements of woodwork; the girls in needlework,
cooking, and household economics. A single lesson a week is indeed a minimum, but that lesson has brought in a new interest and has opened a most attractive field.

In a thousand homes boys and girls are now talking about these weekly exercises. What do the parents think of them? Does it seem to them that the time and money thus spent are wisely spent? Are the forty lessons per year likely to prove valuable subjectively, in mental growth in the direction of correct observation and sound judgment; in the formation of habits of system, precision, and honesty; and in the acquisition of executive skill-objectively, in the knowledge the pupils gain of very practical affairs; and, incidentally, in the new interest with which the whole programme of the school is invested? Would a little less of some other things be more than compensated for by a little more of these new features in the still higher grades? Would such things, in the estimation of pupils and their parents, help to make more school education worth the while?

A long and intimate acquaintance with parents and pupils, and a wide observation of the influence of the laboratory method of education, enables me to anticipate the answers to my questions. What the board has already done is heartily indorsed; what more we can do along the same lines will be looked upon with favor. The work now in progress in the seventh and eighth grades must be extended. Most and best of all, a manual-training high school should be built immediately, capable of receiving 1,500 boys and girls who have completed the lower grades. The value of such a school to St. Louis would be beyond estimation. It would stimulate the grades with a new ambition and hope; it would create an entirely new high-school constituency. ${ }^{1}$ Our Central High School meets a strong demand, and it should be reenforced and maintained generously; but it satisfies less than one-third of the community. The city needs four high schools, two literary and classical, and two scientific and manual. Thus they would complement and balance each other, and the public-school system would be complete.

I do not hesitate to predict, basing my prediction on what I have personally seen, and on the experience of a score of American cities, that were these several remedies applied the attendance in our sixth, seventh, and eighth grades would be doubled, and the high-school attendance trebled, within a very few years. I can think of no greater boon to St. Louis.

## How can the business man of the future be best educated? ${ }^{2}$

By Dr. Arthur T. Hadley, President of Yale University.

Modern business has expanded itself to such a degree and has grown so great that it is impossible to-day for a man to take at once the large leadership of the whole and the small oversight of the details. He must look to see which things are worth doing; must know how to measure his power; know which are the great things that he must do and which are the small things he must leave to others. You know of the man, probably, who objected to the reputation for wisdom which Solomon had. He said he did not think that Solomon was so wise a man, after all, and they asked him

[^29]why, and he said that in the Book of Proverbs he kept slipping up, and they asked him where, and he said: "Well, for instance, he made a terrible mistake in that verse, 'Take care of the pennies and the pounds will take care of themselves.' "

We have got to train men who shall see which are the large things to attend to, to understand organization, to understand division of labor in its broad sense, to understand the opportunities which lie before them, and to select those opportunities for which they are fitted. Now, I can only indicate a few ways among many in which this can be done. In the first place, our men must learn to use their timeto divide their time. As business is done to-day, we do in five minutes what the past generation took five hours to perform. If a man attempts to make those five minutes-to repeat those five minutes all through the day-he will kill himself. He must have outside interests, both in work and in play. Not the least part of modern education is the education to honorable enjoyment of things outside of work.

Nor is it that alone that makes us all-round men. The modern business man must learn to have enjoyment of the great things of literature and history. Now, all of you, I think, in the midst of your busy life work have felt the need of this and have accomplished something of it. But there is a tremendous advantage to the boy who in the years when his character is most plastic can come into contact with the great deeds of other times recorded in past history and with the great ideals of all ages recorded in poetry; can learn their spirit, can see that the present life is not all; and a college education, in the very things that seem most useless for money making, gives to the boy this power of getting outside the present worid-gives the sense of proportion by which his life work is not the whole for which he is striving, but a part of the larger whole, lasting for centuries past and through centuries in the future; an idea which ennobles his business and ennobles him.

And this is important in the present day more than it has ever been in the past, for as business becomes larger it takes more and more the character of a trust. The whole, as it is applied to our large manufacturing combinations, is but an accident, and yet in its application to the great work of production and distribution in the world to-day it has the profoundest of meanings. Business is a trust. It is a thing which a man does not for himself, but for others. He has in his hands the destinies of hundreds and of thousands and of hundreds of thousands of people. There is in the swaying of these lives an element of moral responsibility to which the commercial world is slowly but surely awakening.

The education which shall fit men for the business of the future must be one in all its lines that shall show the young men of the country that moral character, that essential responsibility that is connected with the possession and use of money. The children must learn from their early years what the fathers are slowly and gradually learning. We are told, and told rightly, that each new generation is on the basis to which its fathers have lifted it. We have lifted ourselves-are still lifting ourselvesto this sense of moral responsibility. Now, the great defense of our existing social life, that which protects it against the dangers of revolutionary socialism, is the recog. nition by the leaders of commerce of the fact that money-getting is not a means of avarice, but a means of power to be used by others.

That education is best and highest which most fully brings home to the boy, by illustrations of history, by inspiration of literature, by the teachings of the everyday life of the present time, that none of us liveth for himself; that possession means power, and that power means duty.

Whatever form the education of the next generation may take-and there are many unsetiled questions before the work of our colleges-of this one thing we may be sure. They will and they must educate men to take the leading places who will have from the beginning the conception which has been attained in business life of business success as a trust, of power and influence in the country as a duty to the country and to God.

## ELASTIC GRADING.

By Dr. W. H. Payne, Chancellor of Peabody Normal College.
Whatever may be the advantages of individual instruction-and there are two sides to this question-it is evident that children must be instructed in masses; and it is further evident that these masses must be classified in order that a large number of children may receive instruction in common. All the members of a class must participate in the lesson, and to this end there must be such a degree of equality or sameness in them that they may respond to the requirements of the subject. If there is a pupil in the class who through lack of knowledge or of ability is not able in some good degree to appropriate the instruction that is offered, he is out of his place, he is wrongly classified; or if there is a pupil whose knowledge or ability makes it unnecessary for him to participate in the lesson, he, too, is out of his place and is wrongly classified. Beth pupils should be reclassified, one taking a lower place and the other a higher. The fact of this inequality and the difficulty, if not the impossibility, of providing for it I understand to be the stock objection to the graded school.

As a matter of fact, as schools are sometimes administered there is marked inequality of membership, and it is not removed by prompt and wise reclassification; bat this is rather a fault of administration than of system, and is a difficulty which will disappear under skillful supervision.

Absolute sameness of ability and knowledge is neither possible nor desirable, there being no two children exactly alike in either of these respects, and slight differences not preventing a due appreciation of the lesson. The only requirement is that the lesson and the exposition shall be fairly within the range of all the members of the class, no pupil being unable to profit by it and no pupil too proficient to need it. Within this limit suppose there are inequalities of ability and attainment, what will happen? Simply this: the poorer pupil will appropriate less than the better, but both will gain from the lesson all they are capable of appropriating. Two persons may be able to read the same poem; this poem may tax the best efforts of both, but the relative amounts appropriated may be as 5 to 1 . A thousand persons may listen to a concert, a sermon, or a lecture; all may be profited or entertained, but perhaps in a thousand different degrees.

The error lies in supposing that a lesson is a fixed quantity and that its value can only be gained or lost; but, in fact, most lessons are elastic or indeterminate quantities, responding in their values to the capacities of those who study them.

The question, then, is not whether all the members of a given grade or class are gaining an equal amount from their instruction, but whether each pupil is gaining from that class or grade more than he can gain from any other in the school. If he is, he is in his right place; but if not, he should be reclassed.

In what has preceded I have tried to illustrate the fact that within a given class or grade there may be inequalities in ability or attainment that do not at all defeat the ends of classification; that most lessons have an indefinite content, and that all the pupils of a class may derive from it all that they are capable of appropriating, and that under this condition of things all the members of the class are in their right place, even though they manifest considerable differences in ability.

I come now to consider what I think to be the most important question in gradedschool management: How can the need of reclassification during the year be avoided, or, if it is not wholly avoidable, how can this need be reduced to its minimum? I speak from many years' experience when I say that it is quite possible to administer a graded school in such a way that there will be very few occasions for transferring pupils either to lower or to higher places in the school.

How does it happen that a change in classification becomes necessary? I can conceive of but two reasons for such a change: (1) The pupil has either been classified
unskillifully, or (2) has discovered some marked ability or inability which is an essentially new factor in his case, as it was not apparent when he was originally classified, at the beginning of the year we may suppose.

Now, it is exceedingly improbable that a pupil who has been accurately classified will prove himself so incompetent or so brilliant that his classification must be changed at any time during the first three-fourths of the year. Prolonged absence from illness or other causes excepted, the appearance of such unexpected factor in a pupil's history is so improbable that cases of this description may be ruled out of account, and the only reason that will explain any considerable number of these cases where regrading is necessary is improper classification on the start. The real question, therefore, becomes this: How shall pupils be classified so that there may be no probability that they will need a different classification during the year?

It is a universal custom, so far as I know, to determine at the end of each school year the place each pupil is to occupy at the opening of the next year. More correctly stated, the question is this: What pupils in the school are able to undertake and prosecute the studies of the next higher grade? This question must be determined on evidence, and the best obtainable evidence in this case is the average quality of the pupil's work during the year. Health, industry, regularity of attendance, mental ability, etc., are all concretely represented in this final result, and it is to be assumed that these will remain constant factors in the pupil's history, and that they will affect his progress during the coming year as they have affected it during the year of which inquest is being made. This test, the average quality of a pupil's work during the year, is manifestly a fair one, for the work has been done under normal conditions and has extended over such a long period that an average has every chance of being trustworthy-it is a generalization based on hundreds of individual instances.

To make a final examination the rote test is manifestly unfair, for the pupil's work is not done under normal conditions; there is usually a degree of nerrous excitement and feverish unrest that does not accompany the ordinary recitation; and there are many chances that the examination paper may involve matter with which the pupil at the moment is not sufficiently familiar to enable him to make a fair record of his real scholarship. In most cases the knowledge involved has been acquired slowly, and over in the next grade it will be required only little by little; but at this examination it must be produced on short notice, and there are many chances that the result may not be a proof of the pupil's real ability.

I am far from believing, however, that stated examinations should be abolished; they are a motive, a test, and a discipline; and on each account they are invaluable if they are wisely employed and properly estimated. Their misuse does not justify their disuse. It is perfectly proper that a pupil should be made accountable for what he has had the opportunity of learning, and the result of such an inquest may properly constitute one factor, but a minor element, in the final estimate of his fitness for promotion.

Connected with this subject are several questions of detail which it has not beenz my purpose to discuss at this time.

## EXPEDITION OF CUBAN TEACHERS TO CAMBRIDGE, MASS. ${ }^{1}$

The expedition of Cuban teachers to Cambridge in the summer of 1900 originated in the following letter dated February 6, written in Habana, and signed by Ernest Lee Conant (A. B. Harv. 1884, LL. B. and A. M. Harv. 1889), who had been practicing law in Habana since the end of the war with Spain, and Alexis E. Frye (LL. B.

[^30]Harv. 1890, A. M. Harv. 1897), who had been for a few weeks superintendent of schools for Cuba by military appointment:

> Headquarters Division of Cuba, Habana, February 6, 1900.

## President Charles W. Eliot, Cambridge, Mass.

Dear President Eliot: We are planning to carry as many Cuban teachers as possible (perhaps 1,000 or more) to the United States next summer, and as alumni of old Harvard and with the firm belief that our alma mater offers the best facilities, we naturally turn to her for help.

These teachers will have for their object hard study as well as a tour of observation through our country. The general plan will be as follows: The party will leave Cuba on Government transports or on chartered steamers about the last of June. It is our wish that the steamers may land us directly in Boston, and that the teachers may attend the Harvard summer school for six weeks. The next four weeks will then be given to travel and visits to the great cities, perhaps crossing the continent to San Francisco. We are sure that this brief outline will tell you the whole story. You can readily see what tremendous results would follow with 1,000 intelligent men and women (after such a broadening experience) scattered over the island. * * *

Of course the one great item is expense. Can it not be arranged so that the instruction for six weeks at Harvard shall be free? With this as a starting point, we shall organize a committee in Cambridge and Boston with a view to securing free accommodation in homes during the six weeks. We shall ask various cities to plan temporary entertainment. If we can not secure Government transports, it may be possible to secure some appropriation in the island to pay the cost of steamer travel. The teachers are poor; they need this summer's outing and work. They need it for themselves and they need it for the sake of our own country.

The school laws of Cuba (see article 23 of decree sent you) require courses of summer study from the teachers. This will be one of the great means of educating teachers now in the schoolroom and who can not attend normal schools. Many of these teachers lack even the elements of education; many of them have hardly been beyond the limits of their own towns. We can not carry normal schools to every town and city; but we can carry the teachers to educational institutions, and we want the best, namely, Harvard. We want the teachers to breathe the atmosphere of the greatest school in America. We want them to feel the history and associations, to enjoy the facilities of libraries and laboratories. We want them to come in contact, not only with the strong minds of the professors, but also with hundreds of the brightest and best teachers in America who will this summer be in Cambridge. We want these teachers to have the culture that comes from travel; we want them to carry this culture back into the Cuban homes and the Cuban schools. We want these teachers to know our country, to know our people. We want the ties between the two countries drawn closer, so that all feeling of antagonism may melt away, in order that our country may do a higher and better work for Cuba. * * *

Of course we know that the work ordinarily done in the Harvard summer school would need to be adapted to the teachers of Cuba. The work is of too high a grade in general, and the subjects as a whole are such as are not taught in the public schools of Cuba. Without interfering in the slightest degree with the summer school, could you not plan a parallel school with a course specially fitted to the needs of the Cuban teachers? More than nine-tenths of these teachers can neither speak nor understand English. There are enough, however, with a knowledge of English to form a medium for transmitting the work of the summer school to the others. * * *

As soon as we know whether Harvard University will extend this invitation and will do this grand work we will bend every energy to complete the plans, and we shall succeed. We have submitted the proposition to General Wood, and it goes almost without saying that he will give his powerful support to the movement.
sincerely yours,
Ernest L. Conant.
Alexis E. Frye.
APPROVAL OF THE PLAN.
This letter, which was received in Cambridge on the 12th of February, was considered on the 13th at a special meeting of the president and fellows; and the president was then authorized to reply in the affirmative, if General Wood favored the plan. A few days afterwards a telegram was received from General Wiood strongly indorsing the project, whereupon the following telegram was sent to Superintendent

Frye: "Frye, Habana. Yes. Eliot." Notices of the project and of the affirmative answer of Harvard were thereupon published in the Cuban newspapers, and an active discussion immediately arose as to the feasibility of the plan. It was contended that it would be impossible for young women to go on such an expedition, in violation of the social habits of the Cuban people; the Catholic Church in some places manifested opposition to the project; and at first the general sentiment of the people seemed to be adverse. Superintendent Frye was at some disadvantage, because he had not traveled over the island, and was personally known in Habana and the immediate neighborhood only. Nevertheless, in the course of a month it became evident that there was so much interest in the project that it was expedient to devise the arrangements for the expedition in detail, and to announce them as soon as possible. Thereupon, Mr. Frye visited Washington and Cambridge about the 1st of April. In Washington he secured the cordial cooperation of Secretary Root, who subsequently expressed his approval in a cordial letter to President Eliot, dated May 8.

> SUBSCRIPTIONS FOR THE CUBAN SUMMER SCHOOL.

When Mr. Frye began to discuss the details of the expedition with the Harvard authorities, it soon appeared that the university would really become responsible for the health and safety of the members of the expedition while in Cambridge, and that it would, therefore, be expedient for the university to supervise the lodging, feeding, and protecting of the members of the expedition during the six weeks of their stay there. It also appeared that the regular summer school would not be suitable for the Cuban teachers, and that special courses of instruction would be needed. Thereupon, a public meeting was held in Boston to describe the objects of the proposed expedition and call attention to them; and a circular was issued by the president and fellows of Harvard College asking the community for the means of paying all the expenses of the expedition during its six weeks in Cambridge, including board, lodging, instruction, excursions, and entertainments. Subscriptions began to come in before the end of April, and continued to flow in until the middle of August. The sum asked for was $\$ 70,000$; and that sum was ultimately provided, and a little more, the total subscribed being $\$ 71,145.33$.

The subscription list is an interesting one because of the large number and the variety of persons who took part in it. It was emphatically a popular subscription, and represented all classes of the community. Very little personal solicitation was necessary. The circular was distributed widely, and the newspapers from time to time called attention to the state of the subscription. One large contribution came by order of the court from the unused balance of the fund raised near the outbreak of the war with Spain to provide means of caring for the sick and wounded among the troops in Cuba (the volunteer aid fund). When this fund was distributed in accordance with the order of the court $\$ 20,000$ of it came to the subscription for the Cuban teachers.

## PLAN OF INSTRUCTION.

The plan for the instruction comprehended (1) two lessons a day in English; (2) a course of eighteen lectures in Spanish on physiography, illustrated by as many excursions to different points of geographical interest in the neighborhood of Boston; (3) two courses of lectures in Spanish on historical subjects-one on the history of the United States, the other on the history of the Spanish colonies in North and South America; and (4) lectures on free libraries, on the organization of the American schools, and on imitation and allied faculties in children. Through special gifts received from Mrs. Quincy A. Shaw, a course of illustrated lectures on the kindergarten was provided for the Cuban women teachers, and a workshop course on American sloid for a selected number of Cuban men. Laboratory instruction in physiography being out of the question for so large a number of persons, field study
was adopted as the best substitute. The instruction in English was to be given in 40 sections- 20 for men, and 20 for women. Theteachers selected for these sections were in general young graduates and undergraduates of Harvard College and Radcliffe College. Each teacher of English was to give two lessons a day to his or her sec-tion-one from 8 o'clock till a quarter before 9 , and the other from half past 11 till 12. The lectures were all to come between these two English lessons, and no lesson or lecture was to be more than three-quarters of an hour long. Sanders Theater was to be used for all the lectures; and the English lessons were to be given in 40 rooms, all of which were in the college yard. The afternoons were to be devoted to excursions, each Cuban teacher being provided with at least three excursions each week. Sundays and evenings were to be left free.

## ARRANGENENTS IN CUBA AND IN CAMBRIDGE.

On the 16th of May a circular was issued by Superintendent Frye in Habana, setting forth the project as fully as was then possible, giving all details concerning the transportation of the teachers to Boston on Government steamers, describing the arrangements made in Cambridge for the accommodation of the visiting teachers and the probable advantages of the trip. The circular also gave instructions concerning clothing, baggage, medical attendance, health certificates, raccination, and other details. The university had limited the number of Cuban teachers to 1,450 , which is the capacity of its largest lecture room, Sanders Theater. Moreover, the two dining halls would not accommodate well more than 1,450 persons in addition to the regular summer school. Superintendent Frye was therefore obliged to provide means of selecting these 1,450 persons from the 3,500 teachers who were already at work in the public schools of Cuba. The selections were made by Cuban authorities exclusively-in general by the school boards already established all over the island. As soon as Superintendent Frye's circular had been distributed through the Cuban towns and villages, the work of selection began.

In the meantime, the following arrangements had been made in Cambridge: Students occupying rooms in college dormitories offered their rooms in sufficient number to accommodate all the Cuban men teachers. Rooms enough were then engaged in houses within half a mile of University Hall to accommodate all the women teachers in groups of from 8 to 16 in a house. Each householder undertook, for a price agreed upon, to receive a certain number of teachers, provide them with furnished rooms, and give them a simple breakiast. The use of three houses was given without rent; and several others were offered but not accepted because they were too far from the yard. It was necessary to engage a business agent who should have charge of all the arrangements for the accommodation of the risitors in Cambridge; and his first task was to provide rooms for the women teachers. Since many of the students who offered their rooms in college dormitories were unwilling that their beds, linen, and blankets should be used, it was necessary to hire these articles in large quantity for six weeks' use. It was decided that the Cuban women should eat their luncheons and dinners in Memorial Hall, the capacity of which is 756 seats; and that the men teachers should eat all their meals in Randall Hall, a portion of that hall, however, being reserved for the regular summer school, which consists of both men and women, the women being in the majority. In both halls the Cuban teachers were to be provided with a bill of fare for each meal arranged by the steward, and every teacher was to take whatever he or she wanted from that bill of fare. In Randall Hall, the members of the regular summer school followed the ordinary rule of that hall, which is to order by the plate and pay for exactly what is ordered. Two methods were in use, therefore, at every meal in Randall Hall-one for the Cubans, the other for the American summer school.

By the end of June the business manager, Mr. Clarence C. Mann (A. B., Harv., 1899) had completed his arrangements, and had opened an office in Holden Chapel
as headquarters for information-in fact, for all the business of the expedition. He had also engaged about twenty chaperons to live in or near the houses in which the women were lodged, and a large number of clerks and guides, most of whom were Harvard students in the law school, the college, and the scientific school. All the chaperons, and most of the guides, spoke some Spanish. In addition, a few interpreters were employed. Subsequently it became necessary to engage an additional number of chaperons. These ladies lived in the houses with the Cuban women teachers, ate with them at Memorial Hall, helped them with their English lessons, went shopping with them, adjusted their difficulties, attended to their ailments, tried to prevent overwork and overexcitement, directed them gently, and befriended them heartily. The success of the expedition, so far as the women teachers were concerned, was largely due to these ladies.

## THE EMBARKATION AND VOYAGE.

The embarkation of the Cuban teachers took place at 14 different ports on the north and south sides of the island, and began on the $22 d$ of June. Some of the teachers from inland towns were as much as a week in getting from their homes to their ports of embarkation, such are the difficulties of travel in inland Cuba. Some of the transports touched at four ports, others at but two. On one transport only women embarked; on another only men; on the other three came both men and women. The vessels, being intended for the transportation of troops and supplies, had to be especially fitted up for their new function, and even then they were far from providing the ordinary comforts of ocean liners. Fortunately, the sea was smooth, and the weather fine, though hot. Up to the last moment there was grave doubt how many teachers would actually sail on the five transports. A printed list prepared in Secretary Frye's office in Habana about the middle of June contained the names of 1,397 persons; but nobody felt sure that all these persons would actually embark. The first positive statement of the number of persons to be entertained at the university came by telegraph from General Wood as follows:

Habana, June 29, 1900-2.19 p. m.
President Eliot, Harvard, Boston:
Transports left Cuba as follows * * * June 25, McPherson from Gibara, 110 males, 96 females; total 206 * * June 26, Crook from Matanzas, 295 males * * * June 26, Buford from Cienfuegos, 51 males, 67 females; total 118 * * * June 28, Sedquick from Sagua la Grande, 428 females. Total 1,047 so far. McClellan leaves from Nuevitas. As soon as her departure is reported will wire you.

Wood.
Habana, June 30, 1900-11.56 a. m.
President Elior, Harvard, Boston:
In addition to my telegram of yesterday, McClellan left from Nuevitas 29th with 156 males, 70 females; total $226 * *$ * Total teachers sailed to date, 612 males, 661 females; total 1,273.

Wood.
The expedition was, then, 177 persons short of the maximum number named by the university; but in a country where the means of communication are few and difficult it was a remarkable feat to get 1,273 teachers on board the transports within six weeks of the issuing of the first circular letter of instructions from Superintendent Frye's office.

THE ARRIVAL AT CAMBRIDGE.
The first transport reached Boston rather earlier than was expected, on the afternoon of June 30, and the last arrived on Wednesday, July 4. The transports landed their passengers at the navy-yard, where excellent arrangements were made to prevent the intrusion of any inconvenient public. With the aid of two Spanish-speaking guides in each car, the transportation of the teachers to Memorial Hall in Cambridge
was managed rapidly and safely. Other guides had charge of the transportation of the baggage and its distribution in Cambridge. At Memorial Hall each teacher received a pin bearing a number, by which number the teacher was thereafter to be recognized as a nember of the expedition. At the same time each teacher received a map on which were marked all the college buildings and all the houses in which any Cuban teachers were to live. An excellent map of the vicinity of Boston, furnished by the Appalachian Mountain Club, was also placed in each teacher's hands, and, finally, a table in Spanish of all the lessons, lectures, and excursions of the first half week, arranged by days and hours. By the employment of thirty or forty messengers and guides, most of whom could speak some Spanish, the distribution of the teachers to their several quarters was accomplished with reasonable dispatch. At first it was necessary to conduct the teachers-especially the women-from their rooms to the dining halls and to Sanders Theater, but in a day or two they learned the way.

## HOSPITALITIES AND EXCURSIONS.

The first lesson was given on the morning of Thursday, July 5, when the division of the whole body into 40 sections was made at Memorial Hall, and each section was guided from the hall to the recitation room which that section was to occupy throughout the six weeks. The first excursion, which started on Thursday afternoon, labored of course under some difficulties, because the meeting places were unfamiliar and most of the teachers knew nothing about electric cars, but in two days the whole machinery of the Cuban school was in operation, and thereafter it ran with remarkable smoothness. The excursions were of three kinds: The geographical excursions, which formed a portion of the instruction in geography; the excursions to several characteristic manufacturing establishments, and the excursions of a social nature. Only one of these last was provided by the university, but there were many others that were arranged by private persons.

The Catholic societies of Boston and Cambridge had made arrangements, with the cooperation of the university, to offer to the Cuban teachers facilities for reading and writing in rooms provided by the university within the college yard. For the men, Harvard 1 was devoted to this purpose; for the women, rooms in Phillips Brooks House. In both places the Catholic societies kept their representatives throughout the day and evening, and were enabled to show the Cubans very acceptable hospitality. The Catholic societies also gave two concert dances each week for the Cuban teachers in the Hemenway Gymnasium and took all the responsibility for the management of these entertainments. Three concerts, which were very largely attended and were much enjoyed, were given in Sanders Theater-one by the Baptist societies of Cmbridge, one by the Catholic societies, and one by the Cubans themselves. Each week a programme in Spanish was issued, in which all the lessons or lectures and all the excursions were carefully described, and the numbers assigned to each excursion were given (see pp. 1386-87).

At the Catholic church on Holyoke street, St. Paul's, special services were held for the benefit of the Cuban visitors throughout their stay, and these services were well attended. Through the good offices of Archbishop Williams, Father Fidelis, a graduate of Harvard College in 1861, who had become familiar with the Spanish language through long residence in South America, was brought to Cambridge for the express purpose of attending to the religious wants of the visiting Catholics.

The attendance at the English lessons was excellent, hundreds of the teachers being very regular in their attendance. At the lectures in Spanish in Sanders Theater the attendance was not so good, and yet it was creditable, particularly at the lectures on physiography, which were handsomely illustrated by means of lantern slides. The lessons in sloyd were followed eagerly; and the kindergarten lessons were well attended, considering that hours could not be found for all of them which were altogether free from other appointments. The attendance at the excursions
was about 60 per cent of the whole number of teachers. The weather was hot much of the time, and the Cubans were not accustomed to walking any distance. Those excursions which demanded much walking were not pleasurable for them, and were attended as a matter of duty.

PHYSIQUE OF THE VISITORS.
The physique of the visitors necessarily attracted the immediate attention of those who were responsible for their welfare. The ages of the Cuban teachers ranged from 16 to 60 , but the extremes were not numerously represented. The selecting bodies in Cuba had selected too many elderly people, who were, of course, incapable of learning English, or indeed of absorbing readily new ideas. About 10 per cent of the men were over 44 years of age, and about 10 per cent of the women were over 38. To the Cuban authorities, however, it may have seemed expedient to select for the excursion some persons of influence or high standing in their several communities, whose presence would be a safeguard for the younger members, and who would be able to impress their views on their own people after the return of the expedition. There at first seemed to be too large a proportion of delicate and feeble persons, but the very favorable physical experience of the expedition shows that this feebleness, was more apparent than real. It was obvious at first sight that the Cuban men were decidedly shorter than the American men, and Dr. Sargent subsequently confirmed this general observation by the measuring of 479 of the Cuban men. He found that the medium height of the Cuban male teachers was 64.3 inches-a height surpassed by over 90 per cent of American male students. The Cuban women were also decidedly shorter than American womez; thus, only 20 per cent of the Cuban women attained a stature of 62.2 inches-a stature which is surpassed by 50 per cent of American women students. As to weight, although the Cuban teachers were older than American students, more than 90 per cent of American male students surpass in weight the 114 pounds attained by only 50 per cent of the Cuban teachers. The medium weight of the American female student is 114.6 pounds, and the medium weight of the Cuban female teacher was 102 pounds. Eighty per cent of American female students surpass the medium weight of the Cuban female teachers. Physically the Cuban women seemed decidedly superior as women to the Cuban men as men; and this appearance was borne out by the measurements taken by Dr. Sargent, the Cuban women comparing more favorably with the American women than the Cuban men with the American men. Most of the Cuban teachers gained steadily in weight while they were in Cambridge, and many returned to Cuba in a better condition of health than when they came thence. This gain of weight may have been due to the fact that they were much more active while in Cambridge than they are habitually in Cuba. The men had to walk to and from all their meals and to their language lessons and their lectures, and there was some walking on the excursions. The women walked from their rooms to luncheon and dinner and to their daily lessons and lectures, and many of them went on from two to three excursions per week. Going up and down stairs was also an unwonted exercise for most of the visiting teachers, rural Cuban houses being in general only one story in height.

## REALTH AND CONDUCT.

Of the 1,273 members of the expedition, not one died during the entire absence of the expedition from Cuba; and when the transports landed their passengers at the 14 ports from which they had taken them every person was able to walk ashore. There was no serious accident to any member of the expedition. The health and safety record is certainly remarkable, considering the strong climatic change which the whole expedition had undergone, and the unwonted fatigues and exposures of their life in Cambridge and during the fortnight of travel which succeeded their stay in Cambridge.

With the rarest exceptions the Cuban teachers were habitually gentle and polite to each other and to all the Americans who were brought in contact with them. The men gave no trouble whatever in the College dormitories, and both men and women were neat in their persons and tidy in the dining halls. The men smoked incessantly. Only very few of the women smoked at all, and those in private.

## WHAT THE CUBANS LEARNED.

The chief result of the expedition was the opening of the minds of these 1,300 intelligent people to a flood of new observations and new ideas. There was a great diversity among them as regards education and capacity. As General Wood said in a letter written from Habana on the 24th of February to Maj. Henry L. Higginson, "You will find all classes among them, from the highly educated to those of very limited education, but they are all enthusiastically interested in educational matters, and to these people and to the children they are teaching we must look for the Cuba we hope to build up. These men and women will come back to Cuba with very many new ideas and very much better fitted to teach." A fair proportion of them learned much English and got a new conception of science teaching and history teaching, but many of them were too old to learn a new language, or, indeed, to acquire much intellectual training of any sort, yet all saw with their eyes the American ways of living and the outside, at least, of many American institutions, such as schools, hospitals, asylums, libraries, churches, and theaters. They made two royages on the ocean; they had a hasty riew of New York, Philadelphia, and Washington; they caught a glimpse of the country on their rides through New Jersey, Pennsylvania, and Maryland, and they became well acquainted with Cambridge and the neighborhood of Boston, from Marblehead on the one side to Point Allerton and Nantasket on the other. They came in contact with a considerable number of American educated young people and found them serviceable, cordial, and friendly. When the expedition was about to leave Cambridge for the fortnight's journey, the Cubans wished to have the young men who had worked for them and with them in Cambridge accompany them on their journey, and Superintendent Frye so arranged it; and it was with real regret that the guides and the guided parted at Philadelphia, whence the transports sailed for Cuba.

It is to be observed that the men and women who did the real work for the Cubans in Cambridge were for the most part decidedly young in years-most of them were from 19 to 24 years of age. These young people worked with zeal and energy in a long-sustained, alert care taking. On some occasions the clerks and guides worked all night without relaxing the labors of the day, and this in unusually hot weather.

THE EXPENSE ACCOUNT.
The expedition spent six weeks and a half in Cambridge; and the total cost, including instruction, entertainments, board and lodging, transportation on excursions, medical care, and the cost of clerks, guides, chaperons, and interpreters, was $\$ 58.105$. A balance of about $\$ 3,000$ still remains of the money raised by subscription. If, however, the full number of 1,450 had reached Cambridge, the money raised would hardly have sufficed. The details of the expense account include some curious particulars. Thus, the women in Memorial Hall, with their chaperons, cost fully 25 per cent more than the men in Randall Hall, although they took but two meals in Memorial Hall while the men took three in Randall. The numbers in the two halls were about 700 in Memorial and 600 in Randall. The medical care cost over a thousand dollars, although there was no case of very serious illness, and in spite of the fact that three Cuban physicians accompanied the expedition, whose services were always at the disposition of the sick. For the better treatment of slight indispositions it was found desirable, before half the stay of the expedition in Cambridge was over, to hire a house as an infirmary, and to provide the patients with a resident woman
physician and a trained nurse. The lodging of the women in private houses cost more than twice as much as the lodging of the men in the college dormitories, because the students gave the use of their rooms, whereas the Cuban women's rooms had all to be paid for.

One month's salary was paid to the Cuban public school-teachers while they were in Cambridge. There were 1,181 of them, the remaining 92 being teachers in the University of Habana and the institutes, private school-teachers, and Cuban chaperons and interpreters, together with three physicians and two priests. The bursar paid with perfect precision these 1,181 persons $\$ 60,257.70$ in a little over two hours. In order to offer saie-keeping for the moneys which might be in the possession of the Cuban teachers, the university proposed to receive temporary deposits of money, to be returned to the depositor on demand. This offer was an expedient one; but the Cuban teachers did not avail themselves of it, only $\$ 485.50$ being deposited by them during their stay in Cambridge. The Cuban teachers paid for the two books which were used in the English courses, and for their own laundry work; they rode to and from Boston on their own errands at their own cost; but all their other expenses were paid from the subscription so long as they were in Cambridge.
The visitors expressed very warmly, both in public and in private, their sense of obligation for the hospitality they enjoyed at the university, and for the educational and social privileges which had been provided for them. In general, they seemed interested and light hearted. The dining halls resounded with their rapid and lively talk during all the meals, and every evening after dinner the women lingered long in the vestibule of Memcrial Hall, to which men were admitted. Nevertheless, there was a very pathetic side to the whole experience. Many of the members of the expedition had gone through severe sufferings and anxieties; they had lost friends and members of their own families in the long-continued fighting; they had been sick and half starved, and in all sorts of peril; and they were wholly uncertain concerning their means of livelihood, their appointments as teachers being but temporary, and expiring soon. The contrast between these experiences and their situation at Cambridge was sharp and profound; and then they were to return to their impoverished island, where both the industrial and the political situation are full of grave anxiety. None of them were sure of reappointment to their places as teachers; all were to be examined anew not later than December. In short, though the present was enjoyable, the future was anxious. It was natural that they should bid good-bye to prosperous and friendly Cambridge with mingled sentiments of gratitude, pleasure, and sadness.
The expedition fulfilled to a remarkable degree the enthusiastic expectation of good expressed in the letter of February 6 from Messrs. Conant and Frye, and the good bids fair to be abiding.

Harvard Cniversity-Cuban summer school, 1900-Programa de instrucción para la semana.

|  | 8.30-9.15. | 9.30-10.15. | 10.30-11.15. | 11.30-12. |
| :---: | :---: | :---: | :---: | :---: |
| Julio 9 <br> Lunes | Inglés Sever Hall University Hall | Geografía sanders Theater |  | Inglés Sever Hall University Hall |
| Julio 10 Martes | $\begin{gathered} \text { Inglés } \\ \text { Sever Hall } \\ \text { University Hall } \end{gathered}$ | Geografía Sanders Theater | Kindergarten Lower Mass. Maestras solamente Núm. 1 á 190 | Inglés Sever Hall <br> University Hall <br> Kindergarten Lower Mass. <br> Maentras solamente <br> Núm. 381 á 1836 |
| Julio 11 <br> Miércoles | Inglés Sever Hall University Hall | Historia de las Colonias Españolas Sanders Theater | Kindergarten Lower Mass. Maestras solamente Núm. 191 á 380 | Inglés Sever Hall University Hall Kindergarten Lower Mass. Maestras solamente Num. 1037 á 1999 |
| Julio 12 <br> Jueves | Inglés Sever Hall University Hall | Geografía Sanders Theater | Kindergarten Lower Mass. Maestras solamente Núm. 381 á 1036 | Inglés Sever Hall University Hall Kindergarten Lower Mass. Maestras solamente Núm. 1á 190 |
| Julio 13 <br> Viernes | Inglés Sever Hall University Hall | Geografía Sanders Theater | Kindergarten Lower Mass. Maestras solamente Núm. 1037 á 1999 | Inglés Sever Hall University Hall Kindergarten Lower Mass. Maestras solamente Núm. 191 á 380 |
| Julio 14 <br> Sábado | Inglés Sever Hall University Hall | Historia de las Colonias Españolas Sanders Theater |  | Inglés Sever Hall University Hail |

Harvard Lhiversity-Cuban summer school, 1900-Frograma de instrucción para la semana-Continued.

|  | Tarde. |  |  |
| :---: | :---: | :---: | :---: |
| Julio 9 <br> Lunes | $\begin{aligned} & \text { A. Beaver Brook. } \\ & \text { Números } \\ & \text { 1 á } 240 \\ & \text { Ealida Y. } \end{aligned} \begin{cases}\text { Salida } & 2.35 \\ \text { Vuelta } & 6.25\end{cases}$ | D. Medford. $\begin{gathered} \text { Números } \\ 720 \text { á } 960 \\ \text { X. } \end{gathered} \begin{cases}\text { Salida } & 2.20 \\ \text { Vuclta } & 5.55\end{cases}$ | Ginn \& CorSalidaE.Números <br> 961 á 1200 <br> Z.$\quad\left\{\begin{array}{rl}961-1000 & 1.15 \\ 1001-1040 \\ 1041-1080 & 1.45 \\ 1081-1120 & 2.00 \\ 1121-1160 & 2.15 \\ 1161-1200 & 2.30\end{array}\right.$ |
| Julio 10 Martes | Bearer Brook. $\begin{gathered} \text { B. } \\ \text { Números } \\ 241 \text { á } 480 \\ \text { Salida Y. } \end{gathered} \begin{cases}\text { Salida } & 2.35 \\ \text { Vuelta } & 6.25\end{cases}$ | $\begin{aligned} & \text { E. Mcdford. } \\ & \text { Números } \\ & \begin{array}{l} \text { N6́ á } 1200 \\ \text { X. } \end{array} \end{aligned} \begin{array}{ll} \text { Salida } & 2.20 \\ \text { Vuelta } & 5.55 \end{array}$ |  |
| Julio 11 <br> Miércoles | $\begin{aligned} & \text { C. Bearer Brook. } \\ & \text { Números } \\ & 481 \text { á } 720 \\ & \text { Salida Y. } \end{aligned} \begin{cases}\text { Salida } & 2.35 \\ \text { Vuelta } & 6.25\end{cases}$ | $\begin{gathered} \text { F. Medford. } \\ \text { Números } \\ \text { 1201 á 1999 } \\ \text { X. } \end{gathered} \begin{array}{ll} \text { Salida } & 2.20 \\ \text { Vuelta } & 5.55 \end{array}$ | Ginn \& Co. $\begin{gathered} \text { A. } \\ \text { Números } \\ 1 \text { á } 240 \\ \text { Z. } \end{gathered} \quad\left\{\begin{array}{rr} 1-40 & 1.15 \\ 41-80 & 1.30 \\ 81-120 & 1.45 \\ 121-160 & 2.00 \\ 161-200 & 2.15 \\ 201-240 & 2.30 \end{array}\right.$ |
| Julio 12 Jueves | $\begin{gathered} \text { D. Atlantic. } \\ \text { Números } \\ 721 \text { á } 960 \\ \text { Salida Y. } \end{gathered} \begin{cases}\text { Salida } & 1.35 \\ \text { Vuelta } & 7.01\end{cases}$ | Cambridge clays. $\begin{array}{cc} \text { A. } \\ \text { Numeros } \\ \text { 1á } 240 \\ \text { X. } \end{array} \begin{cases}\text { Salida } & 3.00 \\ \text { Yuelta } & 6.14\end{cases}$ | Ginu \& Co. B. Námeros 241 á 450 Z. $\quad \begin{cases}241-290 & 1.15 \\ 281-320 & 1.30 \\ 321-360 & 1.45 \\ 361-400 & 2.00 \\ 401-440 & 2.15 \\ 441-480 & 2.30\end{cases}$ |
| Julio 13 Viérnes | $\begin{aligned} & \text { E. Aílantic. } \\ & \begin{array}{l} \text { Números } \\ 961 \text { á } 1200 \\ \text { Salida Y. } \end{array} \end{aligned} \begin{cases}\text { Salida } & 1.35 \\ \text { Vuelta } & 7.01\end{cases}$ | Cambridge clays. $\begin{gathered} \text { Námeros } \\ 241 \text { á } 480 \\ \text { X. } \end{gathered} \begin{cases}\text { Salida } & 3.00 \\ & \\ \text { Vuelta } & 6.14\end{cases}$ |  |
| Julio 14 <br> Sábado | F. $\begin{aligned} & \text { Números } \\ & \text { 1201 á 1999 } \\ & \text { Salida Y. } \end{aligned} \begin{cases}\text { Salida } & 1.35 \\ \text { Vuelta } & 7.01\end{cases}$ | Cambridge clays. $\begin{aligned} & \text { Números } \\ & 481 \text { á } 720 \\ & \text { X. } \end{aligned} \begin{cases}\text { Salida } & 3.00 \\ \text { Vuelta } & 6.14\end{cases}$ |  |

Es de absoluta necesidad el reunirse en los lugares de salida para las excursiones á la hora designada. Los carros saldrán exactamente á la hora señalada en el itinerario ó tabla de horas.

En caso de lluvia no habrá excursiones.
Si se cambiase ó transfiriese el día de la excursión se colocará á la hora del almuerzo un ariso en un tablero colocado en el Memorial y Randall Hall.

Se suplica á los maestros que al reunirse en los lugares de salida para las excursiones, se coloquen alineados en compañías de á cinco en fondo y en orden numérico.
X, Calle de Cambridge en frente del Memorial Hall.
Y, Cruce de la calle Broadway y Cambridge.
${ }_{V}{ }_{V}$, Harvard Square enfrente de la Sociedad Cooperativa de Harvard.
Véase el mapa.

## CHAPTER XXVI.

## EDUCATIONAL MATTERS OF INTEREST IN VARIOUS STATES.

ALABAMA.<br>ADDRESS OF HON. J. L. M. CURRY, LL. D.<br>Before the Alabama Polytechnic Institute, Auburn, Ala., June 14, 1899.

*     *         * Education is a vague and indefinite term. As a panacea, it has been too partial as to the number reached, too exclusively intellectual, too little adapted to the varied needs of our population. Ethical and practical culture should be allied to mental; a due acquaintance with a wider knowledge of civic affairs is indispensable if we would restore respect for authority, obedience to law, prevent gigantic frauds, political corruption, oppression of the poor, extortions of corporate wealth, governmental fostering of beggary and mendicancy, and save the Republic. To develop the whole man education must have a moral and industrial basis. As ranks of habitual criminals are recruited from the young, it is manifest that an active force of social corruption must be at work, nullifying the influence of education in diminishing crime.

On the 20th of June, 1837, Victoria ascended the throne as Queen of Great Britain and Ireland. Ten days afterwards the royal assent was given by commission to bills which were the first to become laws in a reign which marks an era of wonderful development. It was an auspicious and prophetic beginning that among the bills was one abolishing the pillory. * * * Sidney Smith, the witty but liberal dean, preached a sermon in which the duty of educating her people was enforced on the young sovereign. National education was postponed in England until 1870. The Government has at last recognized the man in man and the civil obligation to enable every subject to attain high development. Education is the paramount obligation of a republican representative government, the first duty, the only wise policy of a democracy. There is no other agency through which democracy-may I not say civilization and Christianity-can work out rational, logical, and beneficent results. Plato said a man not sufficiently or properly trained was the most savage animal on earth. This education should be free, universal, State controlled, State supported, reaching all classes and every child, and kept scrupulously apart from political partisanship and religious sectarianism. While this rudimentary education for all can not safely be neglected or postponed, it would be a criminal and dangerous error to limit it to primary forces. Higher education is intimately associated with and indispensable to a country's glory.

Great reforms in politics, in science, in invention, in sociology have generally come from bold speculators, from radical thinkers, departing from the beaten paths-from men whose intellects have been broadened and quickened by thorough culture. Illustrations in theology may be found in Paul, in Augustine, Aquinas, Calvin,

Luther; in science, in Galileo, Volta, Tyndall, Carpenter, Spencer, Darwin, Newcomb; in politics, in Burke, Jefferson, Hamilton, Calhoun, Stein, Bismarck, Cavour, Gladstone. These men of thought have directed the course of civilization, have decided for the world its destiny. The light thrown upon questions from the workshop of the scholar has made the world richer and nobler; the cool-headed students control results, but they, as well as the world, are often benefited by those who have boldly propounded theories "at the risk of seeing them adjudged fallacious or even chimerical." To eliminate false, inadequate hypotheses is often the main step to sound discoveries. It would be interesting to trace or describe the great transforming influence of adranced education upon the thought and institutions of the world. The attitude of minds, critical, comparative, inquisitive, projective, often converts knowledge into wisdom, adjusts old truths to new situations. In the Cyclopedia of American Biography is a list of 15,000 names, over one-third of whom were college men. Lawyers, doctors, engineers, preachers, teachers, authors, artists, scientists, inventors were the directive power over their fellow-men. Dr. Harris has wisely said that the commonplace intellect has no adaptability, small power of readjustment in view of new circumstances, and furnishes that large restless and discontented class of people who mistake revolution for reform. Their isolated scraps of information, immature and imperfect knowledge, of which they are so boastful, fail of application in important human affairs. "A hobby or a fad is some fragmentary view of the world set up for the central principle of all things." We have in the immediate future gigantic problems, the solution of which presses heavily upon the best culture of our country, and our educated young men, instead of shirking the calls of patriotism, must be leaders in "the battles of the future." Taking an active share in human affairs is the highest earthly desire of the refined mind. "We are brought into contact with alien nationalities and alien forms of civilization in remote islands." There are home problems, social and political, requiring for their study the best intellect of the best men and the best women. Problems of material development, of the proper settlement of social, political, financial, racial questions appeal with crushing responsibility to patriotism and culture.
Talleyrand, in a report in favor of uniformity in weights and measures, made 30th of April, 1790, to the French National Assembly, suggested national commissions from the Academy of Science in Paris and the Royal Society in London to fix on some natural unity for measure and weight applicable to England and France, and added: "Perhaps even we may be permitted to foresee in this cooperation of two nations, together interrogating nature to obtain from her an important solution, the principle of a political union, brought about by the intervention of the sciences." We have lived to see international conferences at Paris, Geneva, Berlin, and The Hague negotiating on disarmament and arbitration, and peoples kindred in language, law, institutions, religion drawn into alliance stronger than treaties. Lord Bacon, no less a statesman than a man of science or philosopher, claimed as the attribute of men of science or letters that when they do give themselves up to public affairs they carry thereunto a spirit more lofty and comprehensive than that which animates the mere politician. The gravest social problems have been solved by the eager and sympathetic utterances of the poet, who may raise himself to heights which the reflections of sociologists do not attain. Mrs. Browning's Cry of the Children for compassion, humanity, and justice and to forbid employment of children and young girls in mines and factories was heard at least in civil and penal codes.

Perhaps the most gratifying aspect of our higher institutions of learning, of the new education in its broader scope and greater thoroughness, is the admission of girls to their advantages. Twenty-five years ago woman's ability to master ordinary college or university studies was disputed. The "female" mind was condemned as unable to master pure mathematics and metaphysics, or follow the inductions of scientific investigation. To-day, there is a truer conception of women's
possibilities and rights, and eight-tenths of the colleges and universities are open to women students. In my boyhood sewing and knitting were almost the sole means of livelihood for women, and now increasing avenues of industrial labor are open to them.

Like good Samaritans, or angels of the Red Cross, our women are seen defying hardships and carrying to sick and wounded ministrations of comfort and health. He who gazes into the eyes of both young men and young women engaged in coeducative work, with the best facilities and the most improved methods, is looking far forward into the future and realizing the significant fact that these universities and colleges, as well as our public schools, are the glory of American democracy. Who can contemplate what centers of culture, of power, of high influences, the homes of our land will be when presided over by women of purity and cultivated intellects?

A correlative and equally advantageous reform in modern education is the larger introduction of science and its application to the affairs of everyday life, to useful arts and comforts. The scientific schools with elective or graduate courses are largely multiplied. In 1872, in the United States, there were 198 students engaged in post graduate courses; in 1897, 4,919. These graduates, through scientific studies, have a greater command over the powers of nature. By discipline, by original investigation, they push their researches into new fields and make new and practical discoveries. If in the laboratories men had not worked out the truths of physical science, or studied the theory of infinitesimals, if idle stargazers had not watched long and carefully the motions of the heavenly bodies, our modern astronomy would have been impossible and our courses of navigation would have been far inferior to the present. Ages of thinking people have brought the modern world into being, and modern science is the product of the thought-dreamers, of those stigmatized as worthless doctrinaires. The whole art of sanitation is modern and confined in the highest and most useful forms to a few cities and countries. The want of it, breeding disease, pestilence, contagion, is painfully discoverable, even to-day, in the cities and towns of our newly-conquered territories. Typhoid germs have not been banished from the best families, not even from palaces.

This institution, of comparatively modern origin, is a striking illustration of improved education and of the study of the laws of nature. The study of science requires appliances both for instruction and research, and a basis of liberal studies as a means of mental discipline and for better understanding of the main work of the institution. In the twenty-seven years of the life of the college there have been nearly 4,000 students and 552 graduates and 90 post graduates, who are leaders in productive industries, in directive thought, and energies. How much these young men have contributed to the wealth of the State and to higher civilization it is impossible to estimate. The catalogue of a sister agricultural and mechanical college shows that of 84 alumni in the last five years, 68 have secured honorable and remunerative positions, and the technical institutes in Boston and Worcester show a larger per cent. The Nashville American says: "The South has mills and factories to be built, railroads to be surveyed, machinery to be manufactured and put in shape, knowledge of steam, electricity, and engineering to be applied in the opening of its mines, the cultivation of its fields, the building of its cities, and the extending of its commerce. There must be trained heads to do this work. Will they be imported from the North and Europe, or shall we develop them here from among our own people?"

It is an entire perversion of the object and end of technological education to infer that because it is of the highest practical value it does not require thorough discipline of the mental powers and accurate acquaintance with the studies of the literary and classical course. Every scheme of education may have two distinct points of view: First, to qualify the student for the particular work of life which he has to do and the special
business he proposes to follow. In this materialistic, breadwinning age, how to make a living is of supreme importance. Secondly, the general educational results, at which a sound educational system must aim. The broader aspect, which every kind of education should include, is the development of the general faculties, the whole being, so as to make a man or woman a complete citizen, with all faculties developed to the highest possible degree. The technical side is to a waken the creative spirit in work and secure intelligent skill for the profession or pursuit in life the student has chosen, or which angusta res domi has forced upon him. Some one has said there are but three ways of living; by working, by begging, or by stealing. Education should help to work to find food, clothes, shelter for ourselves and families. Lord Brougham would have every peasant a student of Lord Bacon; Cobbett thought it more important to have bacon for dinner. Information should go along with practice, for as man becomes wiser, when what he knows becomes a part of himself, his work will be more productive and remunerative. Thescience which the workman masters will make him not only " a wiser man but a better workman, and will often lift him, if he is ambitious, to a higher plane, or make him more intelligent and valuable if he remains where he is." The acquisition of technical skill, blended with conscience and character, has great practical adrantages, but, in addition to that knowledge, a student should carry away something of more importance. He should carry away "a broadened knowledge of the laws of nature and of the progress of science, which is not less liberalizing and of not less value in the highest sense of education than the most accurate knowledge of the grammar of a dead language, or the work of an ancient civilization." Quoting further the language of Dr. Broun, the distinguished president, "Our contention is that for all that gives an educated man power in practical life, that gives self-reliance arising from a consciousness of trained executive ability, that gives true manhood, that looks to life in its wider aspects and not to self for culture's sake, that the education given by the scientific and technical schools holds no inferior, but for many vocations a superior rank." The achievements of science during this century hare been marvelous. The possibilities of electricity no imagination can compass. Almost every morning journal tells of discoveries of the Roentgen rays, of the liquefaction of air or hydrogen, of the automobile, of wireless telegraphy, and of other valuable discoveries. Each new discovery opens the door for yet more wonderful disclosures, and all demanding a new activity of mind and increasing the necessity of its culture. Mr. Balfour, who turns aside from his official duties to discourse on science and scientific education, notes that only in the latter half of the nineteenth century the absolute necessity of thorough scientific grounding in connection with industrial enterprises has been recognized. Every advance in theoretic science has, in late years, been refiected in a corresponding advance of industrial enterprise and is followed by growth in some industry dependent on that science. The practical application of science results in new scientific conceptions and in new improvements. It is almost an axiom that the study of pure science goes before and produces some new industry. Sir Isaac Newton's great advance in the methods of mathematical investigation, in discoveries in physics, had little practical bearing upon the industries. On the contrary, the discoveries of Kelvin, Dewar, Pasteur, Edison, Newcomb, and others, have found immediate echo in some practical adtantage to the industrial world. Extraordinary additions in the spheres of theoretic knowledge have had applications of incalculable value in commercial production, in navigation, medicine, agriculture, home comforts, expanse of knowledge. Barriers seemingly interposed for hostile separation have been converted into easily traveled highways. An English statesman once gave as a reason why a closer union with the colonies was impossible, that Canada, the nearest of them, was divided from the mother country by a waste of rolling water, and that what God had placed asunder it was vain for man to try to join. Distance has been annihilated by steam and electricity. The most delicate machinery determines rapidly and accurately in the bank
of England the weight of a feather and of a ton of gold. The incomparable president of the Johns Hopkins says that in a battle ship-how she is designed, constructed, propelled, armed, equipped, navigated, carried into action, and brought out of the terrific fire unscathed and victorious, how her range is determined with consummate accuracy, the guns are sighted, projectiles are hurled-you will see the results of applied science more impressive than in any of the seven wonders of the world. A printing press is one of the greatest achievements of mechanical invention as the newspaper is one of the greatest civilizing forces of the times. A New York daily in an hour will use up 50 miles of paper of the ordinary page; print, fold, cut, and count 90,000 copies of an eight-page paper in an hour, 1,500 in a minute, and 25 for every second ticked off by a watch. The discoveries of Watt, Stephenson, and Morse have altered the relations of every country not only with the neighbors, but with the most distant portions of the globe. Inventions have decided battles and the fate of nations. Our Union was consolidated thereby. Germany obliterated the dividing line of centuries and conquered a unity for its people-the military strength and prestige of France, claimed to be invincible, being crushed under blows quick and concentrated, to which modern discoveries and contrivances had exposed them. It was by a triumph of naval and military science that our thriling victories were won at Manila and Santiago, and that Kitchener defeated the dervishes at Obdurman and Khartoum, rescued the Soudan from the Khalifa's black flag, and made possible an early railway from Cairo to Cape Town.

The mere enumeration of discoveries of science in the last fifty years taxes credulity, but they do not surpass the progress in the art and science of teaching, in the study of child nature, of psychology as related to pedagogy. In the teaching of arithmetic, geography, grammar, the methods and the philosophy have been revolutionized. Oh, how tedious and tasteless the hours when the pupil groaned in agony over Murray and Kirkham, over Daboll and Smiley! What school board or parent would have then tolerated the idea that arithmetic could be illustrated by concrete objects, that vulgar and decimal fractions and percentage were but different forms of ratio which could be made intelligible and fascinating by means of simple solids or cardboard surface?

You will comprehend, young gentlemen, that education is not an end, but a means, an instrument for doing good, and that you are to care for manifestations and meanings of life, not simply in the aggregate, but in the individual soul, which is a witness to the Divine. "Precious is the soul of man to man," the personal soul, not measured in terms of property, in the bank book, but in noblest manhood and womanhood, in the spiritual life. This would not be if man were a mere machine. You are heirs of all the ages-citizens of the whole world. As German universities conquered at Sedan, so you are to win victories on broader and more useful spheres. There are heroes, prophets, seers, martyrs of learning and science as well as of war and religion. Questions of incalculable value and importance, grave problems of finance and economics, corporate wealth and power, social and labor and race problems, immigration, municipal government, demand men and women of the most advanced scholarship, researches of the most varied and comprehensive character. To lift the masses to higher intellectual and moral altitudes, nearer to ideal citizenship, demands an advanced intellectual and moral life. * * *

It is needful to elevate in human eyes the conception of the state and exalt the methods and maxims of government, to increase homage for the law and respect for the judiciary, to raise citizenship to be a partnership in every virtue, in justice and right and veraciousness, in equality, in laws and opportunities. Obedience to law, respect for authority, the dignity of the magistracy are fundamental to our security and welfare and if incorporated into life and thought would stop the 10,000 annual murders, the 38,572 suicides, and the 118 lynchings. The epidemic of crime, the insecurity of life, the ready resort to lawlessness, the substitute of passion for reason,
are poor evidences of a high civilization. The State of Alabama needs, and all our Southland needs, that young men should be taught " not so much dogma as deed, not so inuch creed as conduct, correct conduct, pure morality, right living, with all the sweetness and light that shed their radiance about the teachings of the gospel of Christ." * * *

Reference has been made to the influence of the poet upon human laws, and so the poet interprets human life and deduces lessons of practical wisdom from human experience. Moore shows that one may pursue a fleeing form, delightfully fair and attractive, and yet find, although so eager to embrace the tempter, that on lifting the veil a hideous, grinning skeleton disgusts him. Another poet makes voices from sirens come from a smiling island, white arms and golden harps seducing from the weary oar, but on landing the tempted and unwary discovers the fair enchantress to be a slimy fish which slays and then gnaws his bones. Preserve, then, a clean heart and an honest purpose, habits of industry, integrity, and independence, and let no lust of pleasure, fortune, place, or power, no unholy ambition, cause you to swerve one hair's breadth from the strictest rule of honor and right and truth. Cultivate a courageous obstinacy that will not be bribed nor coaxed nor bullied out of the road in which you know you should walk. Forget the things which are behind. Convert dreams into realities. A great preacher said, "Visions and task must go together." The power of education, capacity, is to be utilized in a large and noble way. Knowledge is to be transmuted into character. High aims, ideals, enthusiasms, are to be embodied into achievement. Knowing and doing crystallize into being. Let not the sharp stones in the path stay you in the race. More men fail from want of moral character than from mental deficiency. Parnell, with masterful party leadership, was a dominant figure for ten years in English politics, and then fell disastrously under the impulse of illicit passion. So fell Arnold and Burr. Shrinking from duty relaxes the moral nature. "The forces in the long run go with the virtues." As to such as you is intrusted our country's weal, see to it that that country grows in culture, refinement, honor, freedom, and let it never be forgotten that "freedom consists in keeping willingly within the limits God has traced, and anything except that is not freedom but license, and, at bottom, servitude of the most abject type." Your capacity and spirit for the work laid on your shoulders, to be done not for love of gain, nor hope of praise or selfishness, but for the joy of doing good, of successful accomplishment, are shared by thousands of colaborers from other colleges, striving earnestly for building up the true and the right. As Kipling said:

> Go to your work and be strong, halting not in your ways, Balking the end half won for an instant dole of praise, Stand to your work and be wise, certain of sword and pen, Who are neither children nor gods, but men in a world of men.

As an eminent college president has said, "Whatever the task to which you are appointed, take large views of it. Whatever the duty that awaits you, make it noble by the spirit in which you go to meet it."

[^31]
## DISTRICT OF COLUMBIA.

SERMON BY THE RIGHT REV. MGR. THOMAS J. CONATY, D. D.,

Rector of the Catholic University, at the dedication of Trinity College, Washington, D. C., November 22, 1900. ${ }^{1}$
"With thy comeliness and thy beauty set out, proceed prosperously, and reign. Because of truth and meekness and justice; and thy right hand shall conduct thee wonderfully."-Psalm, xliv, 5 .

It is no ordinary occasion which could gather here the most eminent ecclesiastics of our country, the accredited representatives of many nations, men and women from the highest ranks of life, all to unite in begging God to bless these walls dedicated to religion and science under the invocation of the Holy Trinity and the instruction of the Sisters of Notre Dame. To establish a Catholic college for young women is of the utmost importance to church and state, for it means not only additional opportunities for liberal culture, but what is of more vital import, it emphasizes that liberal culture to be of value must find its soul, its informing and vivifying principle, in religion as made known to us by Jesus Christ through the church which He established among us.

In an age when intellectualism is being unjustly and rudely divorced from the supernatural, when religion is asserted on so many sides to be a vague, indeterminate, unessential quality in advanced knowledge, it is important that Christian schools of higher study should be established for the training of women along the lines of an intellectual development, which is strengthened and safeguarded by the piety and simplicity of intelligent Christian faith.

- Intellect has been given to men and women for the same purpose, to be cultivated, that both may acquire that knowledge which is necessary for the attainment of perfection in one's station in life. Human nature, whether in man or woman, demands instruction, enlightenment, and development. God's gifts are not to be hid in the napkin, but to be used, and woman, as well as man, has a duty to cultivate them. There can be no question as to the necessity of a cultured womanhood. St. Augustine so well says: "No creature to whom God has confided the lamp of intelligence has a right to behave like a foolish virgin, letting the oil become exhausted because she had neglected to renew it; letting that light die out that was to have enlightened her path and that of others, even though the latter be her husband and child only." God has given to woman great responsibilities; on her largely depends the future of society. Sheis the molding force of character; she indeed educates. Her views of life should be sound, as well as broad and deep. True, she should have the best there is in education. Domestic duties are hers, but home and childhood

[^32]have obligations to education, and these obligations fall upon the mother as well as on the father. She owes to education the union of her intellectual and moral life, that she may do her whole duty to childhood. Intellectual culture, conducted on right lines, should not lead to the neglect of practical duties, but should aid to better improvement of them. Intelligence and piety lead to true culture; they lead to good judgment, strong virtue, true happiness. As Fénelon says: "A judicious woman, pious and earnest, is the soul of a great house. No public man can reach to effective good so well as the man who has the aid of a good woman. The world is not a phantom; it is a gathering of families; and is not intelligence needed in that one in whose care are placed the destinies of the homes of the land?" Woman should have the best there is in education that she may fulfill her duty to the home and to society. Educated intelligence is not alone for the woman of leisure, nor for the higher grades of society, but for all according to their opportunities and the sphere of intelligence in which God has placed them. Who will question the advantages which the college offers to women. Knowledge rather than ignorance is the guardian of piety and home training. The broadening of life, the clearer perception of the relations of things, the more intelligent knowledge of religion, the more general insight into the history of nations, the close familiarity with the cultured minds of antiquity, the sound philosophy which leads to God, the discipline of mind and body tending to develop the will according to the laws of Godall these produce the trained, cultured woman, who, as daughter, sister, wife, mother, is intelligent, companionable, and competent to direct and lead in home education; the woman of intellect and piety, who is trained to see that the study of nature does not obscure the vision of God, but rather reveals the footprints of a great Creator whose loves and laws are fully made known by the revealed word. The college woman, the Catholic college-bred woman, must be a force for truth and life and light. She must be an influence for virtue in all spheres of endeavor. While keeping pace with the demands of an intellectual womanhood, she should be trained according to the principles of a philosophy which believes in God, and a psychology which builds itself upon belief in an immortal soul. We need women of culture, but in them should be found the goodness which comes from practical virtue.

We need cultured women, but women whose culture is built upon and permeated with religion, and finds its fragrance in virtue. Religion is the soul of all true culture, illumines and ennobles natural refinement and advanced scholarship, infusing into both the sap of supernatural life which makes our lives like unto God. My thought on this occasion is not so much to discuss woman's education, nor even what woman in general has on her part done for education; I wish rather for the present to limit the scope of these questions, so as to consider what the Catholic Church has done for the higher education of women and what Catholic women themselves have done for education.

Our study is a purely scholastic one and limits itself to that phase of woman's power which manifests itself in instruction, either as teacher or pupil. The old Testament loves to dwell upon the names of women prominent in the instruction of the people-Anna, the mother of Samuel, and Miriam, the sister of Moses; Judith at Bethulia, Esther at the court of Assuerus; Ruth in the fields, and the mother of the Maccabees at the altar of martyrdom. These are a few of the great characters which influenced the Jewish people. The deeds of three of them were of sufficient glory to merit a record in special books of the Testament. In the Christian dispensation Anna taught Mary the law, and Mary unfolded to the youthful Savior the lessons of religion. Anna the Prophetess foretold His greatness, and Elizabeth prepared the Baptist for his life work. St. Paul constantly refers to the women associated with him in apostolic work. He reminds us that St. Timothy, his disciple, learned the Scriptures from his grandmother Lois and his mother Eunice. Priscilla, with her husband, Aquila, accompanied St.. Paul to Ephesus, and "there found Apollo, an
eloquent and fervent man, and expounded to him the way of the Lord most diligently." St. John wrote his Second Epistle to Electa, a lady eminent for piety and charity.
The first centuries of the church are full of examples of noble women recognized as a force in instruction. St. Methodius, in his Banquet of the Ten Virgins, records an old tradition that the famous St. Thecla, a disciple of St. Paul, was skilled in secular philosophy and in polite literature. One of the famous paintings in the Munich gallery commemorates the preaching of the faith in Alexandria by St. Apollonia. A woman, St. Catherine, of Alexandria, has long been revered as the patroness of Christian philosophers, and many significant legends have grown up about her name. Another ancient legend says that St. Barbara was instructed by the great Origen. As a matter of fact, two of the most illustrious Greek fathers, St. Basil and St. Gregory, of Nyssa, were instructed by their sister, St. Macrima. In the legends of the Christian physicians Cosmos and Demian they are said to have been educated by a woman, Theodora. St. Fulgentius, an African father, tells us that he was educated by his mother, who made him learn Homer and Menander by heart before he studied his Latin rudiments. St. Paula inspired St. Jerome to write his most important works; she was as well acquainted, he said, with Hebrew as with Latin and Greek. In letters written by him on the education of St. Paula's daughter we may see the estimate placed by St. Jerome on the higher theological education of women. "When old enough let her read the works of St. Cyprian, the epistles of St. Athasius, and the writings of St. Hilary." One can readily imagine what study this demanded. He said that he would be more honored by teaching the spouse of Christ than the philosopher Aristotle in being preceptor to the Macedonian king. St. Marcella, whom St. Jerome calls the greatest glory of the city of Rome, was often consulted by bishops and priests on biblical questions, after St. Jerome, who had taught her, had left Rome. Paula, Laeta, Fabiola, Marcella, all Roman ladies, were students of Scripture in St. Jerome's school. St. Melania was of great assistance to St. Augustine in his struggles with the Pelagians and the Nestorians, entering often into open controversy with them. St. Eustochium, according to St. Jerome, wrote and spoke Hebrew without any adulteration of Latin. Much might be said of the women who were in constant correspondence with St. Ambrose, St. Augustine, and St. Fulgentius, both with regard to the programme of studies, as also to the system of studies. Valeria, Proba, Eudoxia, and Paula are names of Christian women associated with the establishment of educational systems for the training of young women. These are a few of the many facts which have come down to us from the Græco-Roman period of Christianity.

Volumes have been written upon the work of female monasterics in the history of medirval education. The monasteries and convents which sprang up throughout Europe following the development of Christianity, were usually nurseries of learning. Intellectual activity was often the test of a convent. St. Brigid, at Kildare, in Ireland; Hilda, at Whitby, in England; Ebba, at Coldingham; Lioba, with Boniface, in Germany; Gertrude, at Nivelle, in Brabant, were the originators of great centers of knowledge which aided in keeping alive portions of the ancient learning and culture which otherwise would have surely perished. Mabillon recognizes that one of the glories of the Benedictine order was the learning of its nuns, and he recalls the names of learned religious women in the monasteries, which then took on, in a way, the functions of normal schools. He adds that there was often emulation for study between the monks and the nuns. St. Hildegarde of Bingen, known as the Sibyl of the Rhine, wrote curious miscellaneous treatises, anticipating, it is said, some truths of modern science. St. Gertrude, in the time of Dagobert, learned the Holy Scriptures by heart and translated them from the Greek. She sent to Ireland for masters to teach music, poetry, and Greek to the cloistered nuns at Nivelle. Montalembert tells us that literary studies were cultivated in the monasteries for women in England during the seventh and eighth centuries, perhaps with more enthusiasm than in the communities
of men. The Fathers of the Church, Latin, Greek, poetry, and grammar were in the schedule of studies, while many were devoted to the study of the Pentateuch, the Prophets, and the New Testament.

Hrotswitha, a Saxon nun of Gandersheim, poet, dramatist, and historian, wrote Latin poems and stanzas, "which prove," says Bishop Spalding, "that in the institutes of learning of that day classical literature was extensively and successifully cultivated by women as well as men." Hrotswitha gave the greatest reputation to Gandersheim, and her literary work has of late become the object of admiration among critics, as she by her dramas is thought to furnish the link between the comedies of classic times and the miracle plays of the Middle Ages. In this convent of Gandersheim the course of studies included Latin, Greek, the philosophy of Aristotle, and the liberal arts. In the twelfth century the Abbess Herrade wrote an encyclopedia which contained, says Dupanloup, all the sciences known in her day. St. Catherine of Sienna was privileged to address the Sacred College of Cardinals, and Padre Ventura says: "This showed the power of eloquence and depth of wisdom of this young Christian heroine." Ozanam writes of her: "She shares the glory of the great writers." St. Teresa wielded as strong a pen as any writer in Spain. Quedlinburg, in Germany, like Gandersheim, attained to a high standard of education. Both were called colleges, because they were centers of learning and teaching bodies. Religious and classical writers were studied, and even law was taught.

St. Elizabeth of Schönau, an adviser of Emperor and Pope, was a Benedictine nun in the monastery of Schönau in the twelfth century. The Abbess Gertrude, known as St. Gertrude the Great, in her convent at Helfta, Germany, in the thirteenth century, was one of the great mystics, and she maintarned that the girls should be instructed in the liberal arts, for she said that if the pursuit of knowledge were to perish they would no longer be able to understand Holy Writ, and religion, together with devotion, would disappear.

The Catholic nun as an educational force is not a result of modern civilization, nor of modern educational demands; she is rather one of the forces which have made modern civilization possible, as she is also one of the sources of strength and grace working for the salvation of modern society. She has what Fénelon calls "that divinest characteristic of love, the forgetfulness of self, which spends itself without measure and gives itself without reserve." "Si vis amari, ama"-love is only won by love.

But it was not in the convents only that the intellectual work of women in the Church found expression. Learned women are frequently met with in the ranks of public life, among royal families, and in the quiet of the home circle. Editha, the wife of Edward the Confessor, taught grammar and logic. Queen Matilda, daughter of Margaret of Scotland, in her correspondence with St. Anselm showed wonderful knowledge of Latin and an acquaintance with Cicero and Quintilian, with St. Jerome and St. Gregory. Queen Radegonde, wife of King Clotaire I, was learned in Latin, Greek, and the Fathers, and established at Portiers the first great Christian school for women. She engaged Venantius Fortunatus, the last of the classical Latin puets, to train the nuns. Queen Mathilde, wife of Clovis II, was zealous for science and religion, and established a monastery at Corbie, in France, which became famous because of its able masters. In Italy of the fifteenth and sixteenth centuries women held a high place in culture. Vittoria Colonna, for example, was a woman of broad culture, whose poetical gifts entitle her to high rank in the literary world. The daughters of Sir Thomas More, in England, and Anna Binns, in Flanders, are a few of the many women who in their day attained intellectual greatness. Anne of France, Blanche of Castile, Isabella of Castile, Flizabeth of Hungary, Margaret of Scotland, and many other royal personages might be cited to show the anxiety for higher education which was often rewarded by great literary excellence. It is well to bear in mind that
among Catholic women this desire for education was at a time when war and rapine and worldly ambitions were more usual than concern for intellectual development.

If we cast a glance at the history of universities we will find Catholic women associated with them, not merely as students but as teachers. The Chronicles of Richard of Poitiers, speaking of Manegoldus, remarks that his wife and daughters were highly educated and taught sacred Scripture at the school of Salerno. The seventeenth and eighteenth centuries have some remarkable illustrations of the position held by women in university life in Bologna, Padua, and Pavia, world-famed universities of the church. Among the teachers of Bologna we find the names of Prosperza de Rossi, who taught Scripture; Marietta Tintoretto, daughter of the first Tintoretto, who taught painting; Elizabeth Serani, a famous painter, who taught painting; Novello d'Andrea, who took her father's place in class and taught canon law for ten years; Anna Manzolina was professor of anatomy; a woman succeeded Mezzoranti, at Bologna, as teacher of Greek. Statues are erected to two women who taught botany in Bologna and Genoa. Maria Amoretti taught at Pavia. One of the famous teachers of the University of Padua was Helen Cornelia Biscopia, who proved herself worthy of the title of doctor of philosophy, which she received publicly in the Cathedral of Padua in 1678. Maria Agnesi, of Milan, who has given her name to the mathematical curve known as the witch of Agnesi, was elected to the Bologna Academy of Sciences; Pope Benedict XIV declared that she was without question among the very first professors of analytics. The Pope, in 1750, named her professor of mathematics at the University of Bologna, and when she demurred he assured her that Bologna had often heard, in its chairs, persons of her sex. Mille. Legardiere wrote a work which Guizot says is the most instructive now extant on ancient French law. Plautilla Brizio, a woman architect, built the chapel of St. Benedict in Rome. In the eighteenth century women took degrees in jurisprudence and philosophy in the papal universities. Laura Bassi received the doctor's degree at Bologna and was appointed professor in the philosophical college, where for twenty-eight years she delivered public lectures on experimental philosophy, until her death, in 1778. Vittoria Dolphina, Christina Roccatti, Veronica Cambera, and Tarquinia Molza are a few of the many women honored by university degrees.

These are but a few names selected at random from the long list of noted women whose learning was equaled by their sanctity of life, and whose inspiration was in their Catholic faith. The story is interesting when we consider some of the deeds of women in the encouragement given to education by their interest and generosity. St. Elizabeth, of Portugal, induced her husband to found a university at Coimbra. The first regular professorship at Cambridge, the chair of divinity, was founded in 1502 by Lady Margaret, Countess of Richmond, mother of Henry VII, and of the Tudor line. She founded St. John's College, and also Christ's College. Pembroke College was endowed in the fourteenth century by the widow of the Earl of Pembroke. Clare College was endowed and named by the Countess of Clare in 1338. Queen's College was founded in 1448 by Margaret of Anjou, Queen of Henry VI, who had founded King's College in 1441. Elizabeth Woodville, Queen of Edward IV, and a friend of Margaret, completed her work. Under the patronage and inspiration of the German princess Matilda, daughter of Crown Palatine Louis III, the University of Freiburg, in Breslau, was founded by her husband, Albert of Austria, and that of Tübingen by her son, Eberhard von Wirtemberg. Apropos of those deeds of generosity, it may not be amiss to recall that the first founder of the Catholic University of America, and the donor of Caldwell Hall, was Mary Gwendolin Caldwell, whose magnificent gift made the University possible. Trinity College is a monument to the generous deeds of the noble-hearted Catholic women of America.

For fifteen centuries, therefore, we find a glorious record of Catholic women in education. It is true that most of it has gone unrecorded. The world will never know how beneficent has been the simple, self-forgetful service of consecrated lives
to the glory of God and the salvation of souls. Yet their works speak louder than words. We must not forget, moreover, the social and economic conditions which often precluded the possibility of a more general education of woman in the last few centuries.

I pass on to another interesting phase of this history of female education. It is impossible at this moment to more than refer to the establishment of those religious institutes of women, which for two centuries have taken so great a part in the education of women. When the times demanded a more widespread education of the people, the Catholic Church gave inspiration and encouragement to Catholic women to aid in its revival and general diffusion.

The student of education and educational methods will find abundant food for study in the annals that tell the history of the founders of those great religious institutes for women which have sent forth into the educational life of the Church consecrated virgins whose one ideal is Christ, and whose one aim in education is to make Christ rule in the mind and in the heart of the people. As we know them in our own American life we see Dominicans and Franciscans, Benedictines and Augustinians, Ursulines, Celestines, and Visitandines, and Sisters of Charity, Sisters of St. Joseph, and Sisters of St. Anne, Sisters of the Holy Childhood, the School Sisters of Notre Dame and of the Sacred Hearts of Jesus and Mary, the Ladies of the Sacred Heart, Sisters of Mercy and Lorettines, of the Presentation and of Providence, of the Holy Cross and the Assumption, the Grey Nuns, and the Sisters of Notre Dame of ${ }^{*}$ Namur. Their name is legion and their work is known best by the God whom they reverently serve. A Catherine of Sienna, a Gertrude, an Angela Merici, a Jeanne Francis de Chantal, a Madame Barat, a Mother Seton, a Mother McAuley, a Madame Le Gras, a Nano Nagle, a Mother Clark, a Mother Ross, a Mother Angela, a Mother Lalor, a Socur Bourgeois, a Mary Hatlahan, a Mary Aikenhead, a Julie Billiart-these are a few names of noble women, full of faith and character, who have done wonders in the work of Christian education among Catholic women. From their history may be seen not only the desire for intellectual culture among Catholic women of the highest sanctity, but also the Church appears encouraging and rewarding them with most distinguished honors.

The Church in this country at this moment is rejoicing with the daughters of Nadame Barat, who are thanking God for the Institute of the Sacred Heart, founded by her a hundred years ago for the education of women. It is not a mere coincidence that, at the same time, the Sisters of Notre Dame crown their work in the education of girls by the dedication of Trinity College. Madame Barat, of the Sacred Heart, and Sister Julie Billiart, of Notre Dame, were intimate friends, began their religious work together, and remained united in the bonds of Christian charity, seeking the glory of God in the education of women.

It is indeed refreshing to see Trinity College, for women, rise side by side with our great university in the very capital of our nation to assert before the whole world that true education, true learning, true development is the one which leads to a better knowledge of God, and that Christian womanliness and Christian scholarship may go hand in hand to make the cultured Christian woman the glory of the church and the salvation of the state. A hundred years ago in this capital of our nation the Nuns of the Visitation laid the foundation of the first great Catholic academic establishment in this country. It is a story of courage which deserves well of all lovers of education. The disadvantages under which the great body of Catholics in America has labored during the last hundred years has made the century one of mission work, of church and school building. Academies for girls, colleges for men, crowned by the university, have come as latter-day development. Now dawns the day when our Catholic women seek for post-academic instruction, and Trinity answers the demand. Notre Dame crowns her work of sixty years in America by this beautiful and clas sical college.

The Church has always favored education. It has always been the nursing mother of scholars. While it has had positive views as to woman's place in life, it has never barred the doors to the highest intellectual development of women. The Church recognizes that the world needs the Christian woman of faith and virtue, the wellequipped companion of man, the intelligent guardian of home-the woman intellectual, refined, scholarly, and withal filled with reverence for God, expressing herself in a life of virtue and beneficence. Such a woman is, indeed, the sweetest of all buman loves and the proudest boast of humanity.

In the midst of these solemn ceremonies our thoughts naturally turn to that good and great woman to whom, in common with many others, God in His providence gave a special mission for the education of Catholic girls. Candlemas Day, 1804, was fraught with great blessings for educational work when Julie Billiart and her two companions in the chapel of the Rue Neuve, Amiens, made their vows of charity and devotion to the Christian education of girls at the mass said by Father Varin. Three years later, on another Candlemas Day, they assumed the name of Sisters of Notre Dame. Subsequent vows of poverty and obedience were made by them, and their providential work in education began. France, Belgium, England, Scotland, the Kongo, and the United States were destined to reap the benefits of their devotion to education. Namur, in Belgium, became their mother house, whence issued heroic bands of devoted teachers to build training colleges for teachers at Mount Pleasant, in Liverpool, and Dowan Hill, in Glasgow, the mother house at Cincinnati, and the normal college at Waltham, in Massachusetts. Julie Billiart passed to her reward in 1817, but the impress of her character was left upon the Sisterhood of Notre Dame. The institute founded by her, like all institutions devoted to education under the guidance of the Catholic Church, believes that God is the Alpha and Omega of all education, as He is the beginning and end of all things. There is no avenue of human intelligence at the end of which God does not appear as the Sun, illumining every foot of the way.

Duty and morality are the two great thoughtswhich confront life; but these thoughts demand God, for His gospel is the only lasting force that determines and makes morality. There is but one true morality and that is the morality of Jesus Christ. There can be no true education unless it be permeated with His spirit. In the Christian idea the school is but an aid to the Church in the development of the character which makes the good citizen. The same principle which underlies the Church underlies the school, and that is the development of the kingdom of God in the lives and hearts of men. This is as necessary for the twentieth as for the first century. It is an essential principle in Christian education, and we are Christians. Agnostic scholarship or agnostic ideals will not satisfy us. This principle influenced St. Mark's School at Alexandria; it inspired St. Augustine and St. Thomas Aquinas; it inflamed Brigid at Kildare, Hilda at Whitby, Gertrude at Neville, and Hrotswitha at Gandersheim. It gave its profound power to the love for learning in the monastic system and developed the great medieval universities. It is the corner stone of that mighty army of religious institutes which have sent teachers into every land to train minds and hearts in the wisdom of God's knowledge and the sweetness of God's love. It led Julie Billiart to teach the catechism at Cuvilly; it vivifies and brightens the work of the 1,200 Sisters of Notre Dame in America in their parochial and academic work, as it ennobles the work of their sister institutes throughout the world. The kingdom of God in the hearts and minds of women is the cry that has spurred our own beloved Sister Julie and her faithful nuns in crowning a lifetime of devotion to the education of girls by the establishment of Trinity College for women.

In this holy year, with the blessings of the illustrious Leo XIII, on the threshold of the twentieth century, Trinity enters upon its life work, determined to follow the word of our great pontiff and be a leader and not a follower in education. The Catholic womanhood of America is proud of this day and hopeful of the years to come.

To the Sisters of Notre Dame, in the joy of the dedication of Trinity, we offer sincere congratulations. We can not avoid the feeling that to them may be said the words of the gospel, "Well done, good and faithful servants; because you have been faithful over a few things I have placed you over many." Faithful you have been to the Catholic girl in the school and academy, faithful you will be to the Catholic women in collegiate development. Twenty-five years of my priestly life have been spent in close contact with your educational life, and in justice I am forced to say that you have never attempted what you could not do, and what you have done has been done thoroughly. To the pioneer women of Trinity, who have come from academic schools to enter upon their collegiate work, we say, Have confidence, loyalty, and courage. On you Trinity looks with anxious care. You are Trinity's first children, and will be one day its pride. To the ladies' auxiliary board, who have so nobly seconded the work which has made Trinity a fact, the highest praise is due. To Trinity the university gives greetings as to a younger sister. It bids her enter upon the work, trusting in God for the blessings that will bring success. "Yivat, floreat, crescat." May it live, grow, and flourish with the life of faith until, as under a mighty tree, thousands shall gather beneath its branches seeking for knowledge. In comeliness and beauty may she proceed prosperously and reign! Within her walls truth, meekness, and justice will rule; a genuine righteousness will lead her into these wonderful realms of knowledge where God dwells. The home of wisdom, the pride of our Church, and the honor of our country, Trinity College will stand as a bulwark of religion and morality, the nourishing mother of true Christian womanhood.

## LOUISIANA.

## WILLIAM PRESTON JOHNSTON.

Extracts from a character sketch prepared for the class of 1852 in Yale University, by Rev. Jacob
Cooper.

*     *         * William Preston Johnston was born January 5, 1831, at Louisville, Ky. He was the son of Col. Albert Sidney Johnston of the United States Army, afterwards general in the Confederate forces, and Henrietta Preston, daughter of Gen. William Preston. His father was at that time in active service in the Regular Army, and as such liable to constant removals through the exigencies of his military life. His mother died when he was 4 years old. With the exception of this time, his childhood and youth were passed under the care of his maternal relatives; first, with his aunt, Mrs. Rogers, and afterwards with his uncle, Gen. William Preston. He attended the schools of Louisville; the Academy of S. V. Womack, at Shelbyville, Ky.; the Western Military Academy, at Georgetown, Ky., and, for about a year, Centre College, at Danville. * * *

During this period-that is, until he was 20 -he made many changes, and seems to have had little, if any, real home life. The loss of his mother when he was at a tender age, and the consequent lack of home influence-since his father's army service precluded a settled household-was a sad experience to a man of his intense family affection. But this strong characteristic was manifested despite his unsettled home, and remained one of his marked traits through life. And his educational course was during this period equally unsettled. But he had a substratum of character strong enough to retain its individuality amid so many vicissitudes-nay, rather, in his case, this seeming irregularity proved to be the proper educational process for a thoroughly diversified discipline to fit him for his future work. For thus he gained power by every kind of experience, so as to be able to impress every sort of men to work submissively under his guidance.

This unsettled course of training, which he had the assimilative force to make a
factor of strength rather than, as with weaker characters, a dissipation of native energy, came to an end when he entered the junior class at Yale, late in the winter of 1850. Here he found a system of education the most steady and conservative in the whole country, presided over by a man who possessed the very highest scholarship, and was at the same time an executive the most energetic, pushing, and progressive. Yale was then a college where all that was best in the way of high scholarship, permeated with Puritanic severity of discipline and orthodoxy of religious faith, was working out its fairest results. This, moreover, was the time when the old college curriculum, with its fixed routine of studies, was yielding to the demands of the elective system, and thus expanding to give entrance to the real university. The influences of this transition period at Yale wrought powerfully on Mr. Johnston and others associated with him in study, who were destined to effect the most far-reaching influence in the university systems of our country. * * *

Mr. Johnston joined a class which contained many men of marked intellectual force and executive ability, such as Crapo, Gilman, McCormick, not to mention others. There were many who had had the careful training of the best New England preparatory schools, and by their two years of college work together had acquired a class spirit and unity of action which was of a permanent type, and to which those who entered, as he did, upon advanced standing, were compelled in some degree to conform. But he had enough of the personal equation to assimilate what was good, and resist whatever could give a wrong trend to one who sought only that which is best in everything. He found at Yale a rigid discipline, administered by an unbending will in President Woolsey, a man who had so much goodness and wisdom that his course of action, if inflexible, was nearly, if not always, right. And the impress which this prince among educators left on his pupils was not lost on Mr. Johnston, and was a new factor in his preparation for his life work. * * *

Mr. Johnston's course was marked from the start. When students join an advanced class in an institution where the requirements are rigorous, the newcomer is likely to be somewhat hampered by an inadequate, or at least unequal, prepiration. Though this was his case, he quickly rose superior to all handicaps. His power as a writer was assured at once, and was maintained with increased reputation until the end, as shown by prizes for writing and speaking. There was an inimitable grace and smoothness, embodying at the same time clearness, of diction, which could not be misunderstood, and a vigor in style which forestalled opposition. His scholarship, which had been somewhat inaccurate, owing to his frequent change of schools, now became more thorough under such sticklers for accuracy as Woolsey, Thatcher, and Hadley; and his range of study, which had already been wide, was much extended during his residence at Yale. While he was not a hard reader, a pole, to use the college slang, he did what is far better; he mastered the spirit of the authors he studied, making their thoughts his own and assimilating their substance, to be digested by his native powers. * * * Despite the considerable time spent by Mr. Johnston in social life and his somewhat desultory preparation, he was able to master all his college work with gratifying success, for he won a high grade among his many able and ambitious competitors-as high'a grade as was permitted by the strict usages of Yale in the case of those who enter as late as the middle of junior year. * * * ..

Mr. Johnston left college with the reputation of a highly talented and cultured man, of whom the world was soon to hear a good account. Immediately after graduation he began the study of law at Louisville, Ky., which was his home more than any other place, and where he proposed to fix his residence for the future. In less than a year after his graduation at Yale-that is, from the end of July, 1852, to the end of March, 1853, which time he devoted to professional study-he was graduated from the law school of Louisville University and admitted to the bar. At once he began the practice of this profession, for which he had a manifest adaptation. His
mind was eminently judicial. Calm, self-possessed, of clear judgment and native eloquence, he had all the qualities fitting a man for success as an attorney, a counsellor, or a judge. He was a graceful and fluent speaker, and his transparent honesty carried conviction to the mind of judge and jury alike; hence the fact of his being retained in a case went far toward securing a decision in his favor. His large and influential connection in Kentucky, and, we may say, in all the South, secured for him a clientage; and, this being backed up by elegant culture, he had every encouragement in his chosen work. A career of the most honorable sort was inviting him to enter in and occupy. Either legal practice, politics, or the bench offered him assured success. He did not cease to study law when admitted to the bar. And this certainly was necessary, if he expected to master the wide field before him, for his professional novitiate had been very short-too short, we think, for his best interests; certainly too brief for those less gifted than himself. But such was the usage at this time in Kentucky and most of the Southwestern States. A student could gallop through Blackstone, glance at Kent's Commentaries, put a half dozen State codes on his shelves, and go to pettifogging-if any client would hazard a case in his hands. But Mr. Johnston was wise enough to know that he had but just begun the study of a profession which demanded patient industry continued through a lifetime, and acted accordingly. * * *

Mr. Johnston remained at Louisville from 1852 till 1861, with frequent business visits of greater or less length to New York City, where the legal interests as well as the commerce of our nation centers. No doubt, had the country remained at peace, he would have gravitated to this city, unless he had been elevated to the bench, for which he had the requisites in an eminent degree.

But the mutterings of sectional discord were increasing in intensity, presaging the earthquake which must come to spend the forces which had been gathering since the Union was formed. For there was a disturbing element which could not be quieted, nor allow the different sections to be at peace. * * * Mr. Johnston, who had interests and affiliations of blood both North and South, deemed it his duty to ally his fortunes with that section where he was born and had lived. Though the reasons and motives which led to this step were never discussed between us-no doubt from a mutual desire to avoid a possible breach-still we feel assured that he did not take this momentous step without a careful consideration, and a conscientious regard for duty owed to God and man. One thing we do know, that after his dread appeal to the arbitrament of the sword had been taken, and the case was decided adversely to his views, he accepted the situation with frank and full acquiescence, and became once more, in heart and action, a citizen of the reunited, the whole, country.

Amid the wreckage caused by the civil war to the South, Colonel Johnston fell, but he lit on his feet. He had lost his property, his business, his health, and his bodily constitution. He had lost eve-ything but his integrity, his courage, and his friends. He secured, through one of his classmates of influence at Washington, much legal work there; and his clients at Louisville had not forgotten him. His prospects were of the best for securing a lucrative legal practice, but his health could not endure the strain which comes upon a successful lawyer. Hence, when his friend, Gen. Robert E. Lee, became president of Washington and Lee University, and urged him to join the work of building up that institution, the real trend of his character asserted itself. He now accepted the chair of history and English literature, for which he was, both by culture and inclination, preeminently fitted. He went to Lexington, Va., in 1867, and this brings us to the third period, that of his grand life work, for which all his previous studies and experiences were simply preparatory. * * *

Mr. Johnston had already gathered around himself elements of strength which made him a leading factor in the education of our whole country. The best things were not only hoped, but confidently expected of him. He was known, loved, and
honored, was welcomed wherever he went, with as much heartiness in the North, against which he had fought, as in the South, for which he had jeoparded his life and lost all that a noble man could lose. At this time Mr. Paul Tulane (whose name will stand out forever in the brilliant galaxy which includes Yale, Harvard, Dartmouth, Brown, Rutgers, Cornell, Johns Hopkins, Rockefeller, Stanford, . . . . ") was meditating the founding of a great university in the extreme South. He chose as the proper locality the commercial capital of the South, where he had made his fortune; a place near the mouth of the greatest river system in the world, and in the midst of a country whose fertility exceeds that of the delta of Egypt. His selection of locality was preeminently wise, characteristic of the singularly cool and clear judgment for which this merchant prince was noted. He foresaw that New Orleans would more and more give direction to the movements of education for the whole of the Gulf States, which contain greater pessibilities in the way of undeveloped wealth than any other equal area in the world. Besides, this city, as the educational center for this section, as it has always been that of commerce, would be sought by students from Mexico, Central and South America, with the West Indiez, because of its cosmopolitan population and interests. But Mr. Tulane was wise, not oniy in the location of his projected university, but equally so in the selection of a man to organize the splendid foundation made possible by his munificence. After careful reflection upon many possible administrators of his bounty, he settled upon Mr. Johnston, whom he knew already, and who was strongly indorsed by the board he had named as the one who combined all the requisites for the organizer of a literary institution of the first order. He had already, in 1880, become president of the Louisiana State Agricultural and Mechanical College, at Baton Rouge, which was doing a good work, though within narrow liwits, but now, through his wise management, was coming forward rapidly in importance, when Mr. Tulane's gift for the establishment of a university was received in 1883. Then the institution at Baton Rouge and the old State university at New Orleans were incorporated together. Dut of these different elements, united with Mr. Tulane's foundation, an entirely new organization was perfected, so different in methods and so much wider in scope that it must be considered a wholly different enterprise. For it had all the features of an original plan, and was henceforth to take on such a form as the genius of a president chose to give it.

Mr. Johnston was now 52 years old, in the full vigor of his intellect, and with a more varied experience, we dare say, than could be found in any other citizen of our country. He had been tried in many forms of administrative activity, legal, military, educational. He knew, from much service, both to command and to obey, to lead and to follow, to plan and to execute. His reputation for literature, for teaching, for delicate administration, was as marked as were his characteristics for dignity, grace, intellectual force, and unselfishness. His information on every subject of cuiture was truly encyclopedic and could not fail of being known wherever he might be. * * *
He now appears in a new rôle, that of the founder and organizer of a great university. Here all the qualities of his philanthropic, executive, mental, and moral nature are brought into requisition. His work required more wisdom than the mere art of founding. But his exquisite tact and calmness of judgment were fully equal to the duties demanded of him, not only in disarming opposition, but also in winning the cordial support of those interests which were to be merged into the new enterprise. These qualities being recognized by Mr. Tulane, and his judgment in all matters pertaining to his work being approved by the administrative board, he was invested by the donor with plenary powers in the management of his munificent gift. Hence President Johnston was in reality, as well as in name, the creator of Tulane University. Here his real life work began in earnest; and this institution is the monument which will remain, no doubt, for all time as the tangible expression
of his genius and labors. Henceforth Mr. Johnston lived, wrought, prayed, and suffered for Tulane. But it must not be understood that he took any less interest in the general work of education, for he was constantly engaged in writing, in lecturing, and participating in all sorts of movements for the advancement of culture. As a regent of the Smithsonian Institute he was brought in touch with and helped to direct the most important forces at work in behalf of the higher edacation. The Sophia Newcomb College for Women, which is, popularly speaking, a female annex of Tulane, owes to him its foundation and assured success. From Mr. Johnston's wide relationships by blood, and his knowledge of all the leading factors in the movements of philanthropy and culture North and South, he was peculiarly fitted for advancing both male and female education. He thoroughly understood the wants of his twin institutions, because of his wide and hearty sympathy with their patrons, and knew where to apply for assistance. He was in close touch with the leading men of New Orleans, such as Dr. Palmer, T. G. Richardson, Senator Gibson, a near relative of his own, Judge Fenner, Justice White, and James McConnell, and could count on their energetic aid and wise judgment in carrying out his cherished purposes. Moreover, such was his hold upon the general community, growing out of his transparent honesty, singleness of purpose, and unselfishness, that he could count on the full cooperation of the State authorities, no matter which political party night be in the ascendancy. For his reputation for integrity and clearness of judgment on all matters which claimed his attention were so well established that, no matter what might be the ill temper growing out of political excitement, he could carry a measure through any deliberative body, provided he was permitted to engineer it alone. For all who heard a statement and knew the man who made it were impressed with his thoroughgoing honesty and convinced by the lucid arguments with which he advocated a measure. Thus he had practically carte blanche for the realizing of his views in founding Tulane, so that this university is perhaps more emphatically his exclusive creation than any other of our numerous colleges and universities are of those great organizers whose names they bear.

Hence it was felt by all who knew the real facts involved that Mr. Johnston's life was a necessity to Tulane during its formative period. And therefore the uncertain tenure by which he held to life, and the extreme weakness from which he suffered, kept his intimate friends in constant anxiety. To say that he lived for fifteen years by force of will alone may seem extravagant to those who did not know his actual condition. Yet to such as witnessed the struggles through which his weak frame carried the burden of each university term this will be recognized as a true statement. He was never free from pain a single hour during that long period. * * *
The cares and labors of Mr. Johnston after he went to New Orleans were incessant. Not merely the organization of the complicated scheme of a university in all its far-reaching and constantly expanding activities, but the details of the daily routine must be carefully scrutinized. The letter of inquiry from anxious parents; the caces of discipline which must arise in any literary institution; the selection of a corps of professors; the supervision and friendly advice in the case of those called from abroad and who were strange to the genius loci-for each university has its own usages, and each community where one is located its peculiar temper and traditionsto give quiet suggestions to young and inexperienced instructors, all these things constitute a weight of labor and harassing details, enough for the strongest and most elastic physique. How he did all this is certainly marvelous. For he attended to the minutest details belonging to his office himself. He had, it is true, the good sense to enlist a large body of able colleagues to carry out his views. All great organizers have this distinctive faculty of working through other minds and of so impressing their own lines of policy upon those with whom they cooperate that the force of the driving wheel is distributed so appropriately that each cog and shaft seems to be acting by its individual behest. But though not present and seemingly not
interfering, yet in reality the head examined every item of detail and weighed its ultimate effects on the whole system. * * *

Thus it continued with him from the time of his dreadful sickness in 1862 till his death; but more especially during the twenty years preceding that event. For a stranger, to meet with him casually, and particularly if this occurred during one of his paroxysms of coughing, would think that that weak and tired frame would soon rest in its long sleep, instead of being the guiding power in founding a great university and identified in an efficacious way with nearly every interest dear to Christian culture.

During his last year at Tulane (1898-99) he grew much weaker even than he had been previously. Such was now his prostration that he was compelled to remain in bed nearly all of this time. But he did not cease to work. From that couch of pain still issued directions for the management of Tulane, and wise directions in regard to each of the numerous interests with which he was identified, besides long autograph letters to friends who had no other claim on his attention than that they loved him. He struggled through the year, presided at the commencement exercises in June, concluded his work in all departments, for this which was to be his last year, in his usual methodical manner. Then he set out for a retreat from the oppressing climate of New Orleans in summer, came North to visit his daughter in Pennsylvania, where he hoped by the high altitude and bracing air to recuperate, as he had often done before. But this time the hoped-for relief did not come. He grew still weaker, and with difficulty was removed to his beloved Lexington, Va., where he had spent so many happy years amid the exquisite scenery of this charming spot. He came to the home of another daughter, and for a short time seemed stronger. He was uncomplaining, cheerful, and even witty, as was his wont. The end came withoat premonition to himself or to those who watched beside his bed; and in the early morning of July 16, as the sun was peeping over the momtains and flooding the valley with light, he ceased to suffer. * * *
Mr. Johnston was so thoroughly honest, so wholly free from crooked ways, that whatever he undertook secured favor from those who did not take the pains to investigate his methods, or had not the ability to comprehend them. In this way a noble character lays all men under contribution. It utilizes the forces of ignorant though strong characters, and enlists the cooperation of those who are bad at heart, but who wish the reputation for integrity to effect ulterior aims. The good are willing to follow a leader who always strives to do right, and the bad are shamed into acquiescence by the force of public opinion; and thus a noble character draws all influences into the wake of its pilotage.

A second factor of his influence was his courtesy in speech and action. This indeed seemed native, springing from the goodness and elevation of his heart. He was popular in every age and position during life. In truth his character did not seem to be affected by considerations of time or place. He had the vivacity of youth and the wisdom of age at every period. This made him a favorite with young people, over whom he exercised a perfect witchery, without effort and, of course, tustudied. In his student days he was admired and loved by the humblest as warmly as by his own special coterie. This irresistible attractiveness was conspicuous in his management of students both at Lexington and New Orleans. A notable example was when there was a formidable rebellion at Tulane, which, for a time, threatened peril to the whole institution. But he met the angry and desperate body of rebels with no sign of trepidation, and by a few firm but gentle words calmed all into cheerful obedience. He was not afraid of discipline, and those young men who were incor-rigible-fortunately very few in any of our literary institutions-were dealt with summaxily. For any good officer of the law knows that punishment, in order to effect its best results, must be summary in its execution and thorough in its reach. But sympathy with young men and whole-hearted devotion to their welfare prove such a potent factor in their control that punishment is rarely necessary. * * *

## MASSACHUSETTS.

## The EdUCATED MaN aND THE STATE.

By Henry Smith Pritchett. ${ }^{1}$
I should fail to do justice to my own feeling did I not pause for one moment to acknowledge the kindly greeting which has just been extended to me at the beginning of my life among you. For the words of encouragement which have been spoken, for the assurance of cooperation and support, for the cordial personal welcome, I am more grateful than I can say. The response to such words and to such welcome is not to be made at this time and in this place. It can be given only in the years of service which lie before us.

It was my fortune some years ago to pass from a university place to that of an executive office of the General Government, to go from the work of training students to a corps of men who were recruited almost wholly from the ranks of college graduates. In the attempt to secure for the Government service men of the best training, the relation of the educated man to the Government, whether as an employee or as a citizen, has been a matter of immediate practical consideration. In such a position one studies the output, if one may use that term, of our universities and of our colleges from a different point of view from that which the teacher occupies. He measures the college man in comparison with other men, from the standpoint of his ability to do things, and not from the standpoint of his knowing how to do things.

The two points of view are very different, and for this reason I have deemed it not entirely without interest to say a word to you at this time concerning higher education in relation to the Goverument, and more particularly to consider the part which educated men are to-day taking, and ought to take, in government; the obligations of the higher institutions of learning to the State; and, finally, to discuss briefly the question whether these obligations are being fairly and honestly and intelligently met.
There is a saying which is current in the student talk of German universities to the effect that of those who enter the university doors ore-third breaks down and onethird goes to the devil, but that the remaining third governs Europe. Such expressions are oftentimes more apt than true; yet, on the other hand, they sometimes represent a popular conriction more correctly than formal tables of statistics, just as a bit of floating straw shows the direction of the ciurrent more truthfully than the powerful cruiser. Unfortunately, it is not easy to subject such a statement to accurate examination. The statistics of the unsuccessful are necessarily far more incomplete than the statistics of those who attain prominence. The devil keeps no books; or, if he does, they are not open to the examination of the student. But it requires only a limited study to show that the last part of the statement is certainly true, at least so far as Germany is concerned. The educated man, trained either in the university or the polytechuic, governs Europe to-day.
No one connected with the Government of the United States in any executive capacity can fail to see that the Government of this country is also passing rapidly into the hands of educated men. The population of the country at this time is approximately $76,000,000$ people. The number of college-trained men is perhaps less than 1 per cent of the population. From this small percentage, however, are filled a majority of those legislative, executive, and judicial places of the General Government which have to do in any large way with shaping its policy and determining its character. Not only in the ordinary positions of the Government service is this true, but the Government is calling more and more frequently upon the educated man for

[^33]the expert service for which his training is supposed to fit him, and this not only in the relation of scientific experts, but in all other directions in which the Government seeks the advice and the assistance of trained men.

On the other side of the Pacific a commission of five American citizens has undertaken the most delicate, the most dificult, doubtless the most thankless task in the establishment of civil government to which any group of our citizens has ever devoted its unselfish efforts. It is a significant fact that a majority of that commission are college professors.
The presence, in constantly growing numbers, of educated men in government service means also the displacement of an increasing number of poorly trained men. It is the old story of the untrained against the trained man, and to-day the world recognizes that the day of the untrained man has gone by. In the service of the Government, as in all other fields where intelligence and skill are factors, the educated man is displacing from the higher places the one who has no training or who has a poor training. Whether wisely or unwisely, whether for good or ill, it may be accepted as a fact that the Government of this country is passing rapidly into the hands of the educated man. It is a matter of the highest practical importance to inquire whether the man who is coming into this power is worthy of it, and whether the training which he has received in the college or in the technical school is given with any purpose of fitting him for this trust.

Before approaching this question it may be well to call to mind the attitude of the Government of the United States and of the State governments toward higher education and toward scientific investigation.
Notwithstanding the crudeness of our legislation, it is still a fact that Congress and the State governments of the United States have been generous in gifts to higher education and to scientific work. The gifts of the General Government have come from the sale of public lands. To the separate States has been left, heretofore, the power to lay taxes for the support of institutions of higher training. It is difficult to bring together the data for a trustworthy statement of the value of all these gifts, but they aggregate an enormous amount. At the present time the Federal Government is devoting more than ten millions annually to the work of the scientific departments of the Government. At the very beginning of organized government in this Commonwealth the question of education was one of the first with which the State concerned itself. The principle of State aid to higher education, then recognized, has been since that time accepted by the General Government and by eveiy State government. In New England, Harvard and Yale and other foundations of higher learning are now dependent upon private endowments, yet almost every one of these has at one time or another received State aid. Harvard was in reality a State institution, having received•from John Harvard only $£ 800$ and 320 books. And while the more generous gifts to New England colleges have come from private sources they hare never hesitated, in time of emergency, to come before the representatives of the people and ask for assistance. These petitions have never been disregarded by the State. The American Republic may fairly claim to have adopted and to have followed out Macaulay's motto, "The first business of a State is the education of its citizens." In no land and in no time has the State responded so quickly and so generously to the demand for higher education as in the United States of America during the last half century.
If this aid had been rendered by an individual, if one could imagine the spirit of the whole people, both State and national, incarnated in a personal intelligence which should take cognizance of the obligations of those whom the State had befriended, I can imagine that one of the most direct questions which such an intelligence would address to those who direct the education of the youth would be," I, representing the whole people, have given you freely of my national domain, the heritage of the whole people. I have founded and supported colleges and universities and technical
institutions. What direct return has been made to me for this assistance, and have those who control the training of the youth kept in view their obligation to me and the dignity and the needs of my service?"

The question is a perfectly legitimate and a perfectly fair one. And, while it is easy to answer it in generalities, it is not so easy to give a reply of that definite sort which shall lead somewhicher. The subject is too large and has too many ramifications to be discussed on this occasion in full. Perhaps the best I can do is to call attention to the importanee of the inquiry itself and to the obligation which exists for a definite, full, and, most of all, an honest answer. In addition, I shall endeavor to point out certain directions in which, to my thinking, the ends of the Government have been well sorved in onr system of education, and certain others in which, it seems to me, we need improvement.

It seems to me that it may be stated as a general result that the State (using that term to characterize both the General Govermment and the State governments) has been well served by the institutions of higher learning. It can be shown satisfactorily that in the main these institutions have not only served the general purpose of the difiusion of knowledge among men, that they have trained men in such a way as to make them more effective in the pursuit of their own fortunes, but also that they have given back to the State men well trained to serve it. There can be no question that, judging by the general result attained, the expenditures of the State for higher education are justified by the result, and that the harvest which the State is to reap from its investmont has only begun.

Notwithstanding this general outcome, there are certain directions in which the State may reasonably demand additional results. The State represents, as does no other agency, the whole people; and, in considering the obligations due the State and the best method of discharging them, we must remember that the institutions of learning are attempting to serve, in the most direct and at the same time in the broadest way, the whole body of citizens.

One thing which the Government has a right to expect of those educated in the higher institutions of learning is a decent respect for the service of the State.

I am sure I express the sentiment of all men of serious purpose who have stood in executive places in Washington when I say that there is no greater source of discouragement to those who are honestly striving for good adminietration than the facility with which good and honest and intelligent men will ascribe the worst motives to those in Government office.

There is a feeling-and it finds expression perhaps more often in our institutions of learning than elsewhere-that, although a man may be perfectly honest the day before he goes to Washington, he is to be suspected of any crime the day after; and the discouraging part is that the record of a whole life of consistent devotion to duty is no defense whatever against the most sensational accusation. Again and again a man of pure life and of high purpose, who has accepted a post under the Government, discovers with infinite pain and surprise that the silliest charge against him is accepted, not only among the idle and the curious, but by those upon whose support he had most counted. This tendency is not peculiar to our time or to our nation. It is part of "that touch of nature which makes the whole world kin"-a kinship as universal as it is detestable. One can not think of the failure to discriminate betwen the dishonest few and the honest many, of the courage brought to failure by wellnigh universal suspicion, of the unmerited pain, from Washington's day to this, inflicted by the careless judgment of men's motives, without recalling the words of Edmund Burke, "It is very rare indeed for men to be wrong in their feelings concerning public misconduct-as rare to be right in their speculation upon the cause of it. I have constantly observed that the generality of people are at least fifty years behind in their politics. There are very few men who are capable of comparing and digesting what passes before their eyes at different times and occasions so as to form
the whole into a distinct system. But in books everything is settled for them without the exertion of any considerable diligence or sagacity. For which reason men are wise with but little reflection and good with little self-denial in the business of all times except their own."

Let me say that no man can be brought into contact with the actual machinery of our Government, can mingle with the men who make our laws, who interpret them, without gaining not only a wholesome respect for the service of the State, but also a reasonable hopefulness for the future of our institutions.

So far as my judgment goes there are few conventions of men brought together for any purpose in which the average of intelligence and of honesty is higher than in the American Congress. It goes without saying that its members are influenced by personal considerations, by social ties, by all the things which move men-in other words, they are human-but it is a gathering of men who honestly desire to do the right thing. It is the fashion to speak of the honesty and the intelligence of the good old days when the Republic was young and when statesmen were pure, and to deprecate the decadence of the present day. Such tallk is the purest nonsense. The general intelligence of the body of Congress is higher to-day than it ever was, and its conscience is quite as acute. Unfortunately, the work of quiet and serious men receives little attention from the public, although these men count enormously in the actual work of legislation.

Let me illustrate with a single example. Two of the most important committees in the House and in the Senate are the Committees on Appropriations. Imagine for an instant the enormous number of objects for which a government spends its money. Consider the wide range of subjects which the demands for money cover. Imagine, if you can, the patience and the judgment and the honesty which are involved in holding the purse strings of the richest nation on earth, and the difficulty of deciding upon the wisdom of requests which range from the demands of abstract science to the promotion of the interests of some small neighborhood. Think for a moment what an opportunity for men who are disposed, even in the remotest way, to dishonest practices, and, having considered all these, take into account the following facts: The chairmanships of these two committees have for ten years past been practically in the hands of four men, two Republicans and two Democrats. During that time these committees have had in their hands the allotment of a larger sum of money than was ever controlled by any body of men in any nation at any time of the world's history. These men are to-day either poor men or in the possession of modest incomes made from their own exertions, and so honestly and so carefully have their duties been performed that not the slightest insinuation of wrong-doing has ever been made.

In the executive branches of the Government, as well, one will find a quality of service to command respect. There are incompetents in greater numbers than one could wish, but, since the civil-service law has made it possible for men of education and of energy to find a career in Government service, the quality of men entering it has steadily improved. And, notwithstanding the half-hearted service of the few, it is true that the Government receives quite as much of devotion and of unselfish service as one can find in the ranks of those engaged in private business. It is the presence of this large number of devoted and intelligent men which makes the machinery of government run smoothly and which brings out the results. That this class is growing relatively larger in the service of the General Government, and that the ideals of duty which are held up before them are becoming higher year by year, no one can doubt.

The Government of the United States is honestly conducted. Its condition furnishes to those who know it best the basis of a rational optimism as to the future of democratic institutions. In its service men of education should find, in increasing numbers, careers of the highest usefulness and of the highest dignity.

Another quality of the education given to the youth upon which the State has a right to insist is its catholicity. In the matter of education the State makes no distinction. It aims to make its highest training accessible to the humblest as well as to the most aristocratic. No system of education is a good one for a free State in which the students and graduates of its institutions of learning get out of touch with the great body of their fellow-citizens. Such a lack of contact between the men of education and those who lack education brings about a feeling of distrust as between men of two distinct classes. Under such circumstances the educated man is likely to lose the perspective concerning social facts and tendencies, and to become suspicious and narrow, to feel that the country is fast going to the bad, and that the advice and service of the educated man are not properly appreciated.

One of the practical results of this feeling has been that the college man has not always realized that he was to take his place side by side with the man who had no college education. He has been inclined to forget that he must expect to begin where the uneduated man legins, and that his education is not a mark to distinguish him from other men, but a training which ought to enable him to do his part of the world's work better than the man who lacked this training; in short he ignores the fact that he is not one whit better and is to receive not the slightest consideration because of his better opportunity.
It is the protest against this feeling of superiority, whether real or imagined, which is at the basis of most of the objections now offered to a college education as a practical preparation for the active work of life. The feeling is expressed in the following words from the late Collis P. Huntington. In a magazine article published just before his death, entitled "Why young men should not go to college," he says: "Somehow or other our schools, which teach young people how to talk, do not teach them how to live. It seems to me," he writes, "that slowly, but surely, there is growing up a stronger and stronger wall of caste, with good honest labor on one side and frivolous gentility on the other."

In so far as this charge is true-that a college training tends to make those who receive it a class apart, and prompts them to make extravagant demands-in just that proportion is it a fair criticism of our system of instruction. We have a right to expect that the college-trained man, more than any other, shall be tolerant and patient; that he shall understand, as no one else can, that truth and honesty and virtue belong to no age and to no nation, that they are the property of no party, of no sect, and of no class. And we have a right to expect that, realizing this, he shall have healthy views regarding human nature. If the college atmosphere does not encourage all this, then the college atmosphere needs quickening.

How far this criticism has been justified in the past I do not feel able to say. I do believe, however, that the college spirit of to-day is wholesome and catholic, that the men in the higher institutions of learning are in closer touch with the great body of mankind than ever before, and that men who go through college and take their places in the world do so in accordance with the rules of common sense.

But beyond all such questions, and including them all, is another in which the State is vitally interested; and this concerns itself with the quality of citizenship which our system of education is adapted to produce. This I hesitate to approach, since to discuss it is to open the whole question as to what the object of education is and what subjects should be taught to accomplish that object.
It is the old question which has been discussed for twenty-five hundred years, and never more vigorously than during the past decade. However we may have improved the methods we have certainly never been able to state the questions involved more clearly than the Greeks. Listen to Aristotle. He writes: "What, then, is education, and how are we to educate? As yet there is no agreement on these points. Men are not agreed as to what the young should learn, either with a view to perfect training or to the best life. It is not agreed whether education is to aim at the development of the intellect or of the moral character. Nor is it clear
whether, in order to bring about these results, we are to train in what leads to virtue, in what is useful for ordinary life, or in abstract science."

These are the questions which have formed the basis of discussion during the last quarter century among those interested in education, except that education for the development of character has been less talked about. Could any modern writer state the questions more aptly or in fewer words than Aristotle?

Is education to have for its object the training of the intellect, or is it to aim at the development of character, or is it to undertake both objects? And, if the character is to be developed, what are the formal means which are to be used in this development?

These questions have been asked anxiously since systems of education had their beginning. In our day they seem to have settled themselves, so far as the practical efforts of the universities and colleges are concerned, by a process of exclusion. It is tacitly assumed at present that education-like all other training-has for its end the acquisition of power. In order to acquire power quickly the whole effort in modern education is directed toward the training of the intellect.
There is no disputing the fact that the educated man has in the world, by reason of his education, a higher potential. Is it equally true that he has, on the average, a stronger and higher type of character? Is the college man broader in his sympathies, more tolerant, more courageous, more patriotic, more unselfish, by reason of his life within the walls of a university or a technical school? Are the men who come each year, in ever-increasing thousands, from the college doors prepared to shoulder more than their proportionate share of the burdens of the State and of the country, or are they provided with a training which will enable then more easily to escape its obligations?

It is, of course, not easy to compare the relative moral worth of men and say that one class is, on the whole, more useful than another. But, whatever our system of education is doing or is leaving undone in the development of character among its students, the State is caying, in terms which are becoming every day more emphatic, this: "However desirable it is to train the mind, when it comes to the service of the State (if, indeed, the same is not true in all service), character is above intellect. It is vastly important to the State that her servants shall be quick, keen-witted, efficient; but it is absolutely necessary that they shall be honest, patriotic, unselfish, that they should have before them some conception of civic duty and proper ideals of civic virtue. Give me men, intellectual men, learned men, skilled men, if possible, but give me men."

This is the old story. It is the lesson which every age preaches anew to the age about to follow. Shall we ever learn it? Will it ever come to pass that in our system of education the development of character will go hand in hand with the development of intellect, when to be an educated man shall mean also to be a good man? Probably no one looks upon Plato's ideal republic as the basis for any effort in practical politics. Nevertheless it ought to be true that civic virtue should be a part of the life and of the environment of our seats of learning, and that men, along with the training of their minds, should grow into some sort of appreciation of their duties to the State, and come to know that courage and patriotism and devotion rank higher in this world's service than scholarly finish or brilliant intellectual power.

When we look back on our own history as a nation we can but realize that in the crises of our national life this truth has been forced home to us. In the darkest hours of the Revolution it was the courage, the never-failing patience, the unselfish devotion-in a word, the civic virtue-of George Washington that was the real power upon which the people leaned. In the agony of our civil war, when the fate of the nation trembled in the balance, the character of Abraham Lincoln-his devotion, his hopefulness, above all his knowledge of the plain people and his faith in themcounted more than all else in the decision. Neither of these men was the product of university training, nor did he grow up in an academic environment; but each had
the training of a school where devotion to the State was the cardinal virtue. When next a great crisis comes, no doubt there will be a Washington or a Lincoln to meet it; but will he come from a university?

When Washington came toward the close of his life he thought deeply over the dangers of the new State and the necessity for the cultivation of a spirit of intelligent patriotism. As a best means for inculcating this spirit he conceived the idea of a great national university. One of the main objects of this university was to afford to the youth of the country the opportunity for "acquiring knowledge in the principles of politics and good government." The idea was a splendid one; and while, in my judgment, the need for a national university no longer exists (unless, indeed, one is needed to teach the principles of good politics), Washington's idea that the university is a place which should train not only the intellect but the character, that it is a place where the student should find an atmosphere adapted not only to the development of accurate thought but also to a wise and tolerant spirit, that in the university he should gain not only intellectual strength but also a just conception of his duty to the State was a right view. And until this is recognized-until we bring into our college life and into our college training such influences as will strengthen the character as well as the intellect, until the time shall come that the educated man shall by reason of his training be not only more able than his untrained neighbor, but also more patriotic, more courageous, better informed concerning the service of the State, and more ready to take up its service-until such a spirit is a part of our system of higher education, that system will not have served the ends which education should serve in a free State and for a free people.

And in this comection I can not refrain from a reference to the aim of those who founded the Institute of Technology, and to the conception of duty which they have impressed upon the institution. The recognition of the value of exact science as a means for the training of the mind came slowly. Even after it did come men were slow to recognize the value to the race of the results of science. The spiritual side of scientific research is a matter which even to this day men are slow to comprehend, notwithstanding the powerful effect which it has had during the last generation upon the thought and upon the conscience of the world. "Newton was a great man," writes Coleridge, "but you must excuse me if I think it would take many Newtons to make one Milton." That was the attitude of his age. Even forty years ago there were few men in this Republic who appreciated in any clear way the value of science in the training of men. To Willam Barton Rogers, and to those who labored with him, belongs the credit of anticipating the value of this training and the demand for it. But, outside and beyond all these considerations of fitness and of practical results attained, they also impressed upon the institution certain princtples which are dominant in its life to-day. One of these concerns itself with the very situation and environment of the institute. The Institute of Technology has its roots in the same soil which supports the industrial life of the city and of the nation. Its contact with the practical side of life is immediate and real. It not only draws its strength thence, but expresses as only that can which has a reai and vital connection the aspiration of those who labor in science for the upbuilding and the improvement of civilization. The Institute of Technology not only aims to serve the people, it is itself of the people.

One of the lessons which the study of exact science leaves with the student is the necessity not only for exact work, but for a high ideal. Science is satisfied with nothing short of perfection; and this principle, when it pervades a body of men, comes to govern and control the spirit in which their work is done. No better heritage can be left to any institution than that which has been faithfully handed down to you-that in education it is not sufficient to be merely accurate, it is necessary to hold fast to the highest ideal. Once this ideal gains control of a student's life that
student will undertake faithfully and courageonsly whatever duties lie before him, whether they concern his professional life, his social life, or his country's service.

Let me add, in conclusion, a word of personal greeting, speaking as one may when he addresses those who have come together, drawn by a common interest.

In the name of the corporation and of the faculty and of the students of the Institute of Technology I thank those who represent here other institutions for your presence on this occasion. Your coming is a source not only of pleasure but of encouragement to us, and helps to emphasize that spirit of common interest and of common helpfulness which ought ever to mark the relaitions of those who have to do with education. The Institute of Technology extends to you, and through you to the institutions which you represent, the assurance of its cordial good feeling.

Two of those who sit upon this platiorm, the president of Lehigh University and the president of Harvard University, came from the faculty of the institute. This fact gives to your presence bere an additional element of interest, and we extend to you a special greeting. To Lehigh University, in the sturdy work which she has done and is doing, for the courage with which she has not hesitated to face difficulties, we extend our warm congratulations. To our near neighbor, the oldest and greatest of American universities, we offer a most hearty greeting. We rejoice in the growth and in the strength of Harvard University, and take courage in the thought that we join hands with her to-day-as an elder sister-in a work not only for this city and for this Commonwealth, but for humanity.

Gentlemen of the corporation, in accepting the responsibility which you have this day invited me to share with you, I do so hopefully and with full confidence in you, in this community, and in the future. There is no greater work committed to men's hands than that to which we are called. As I think of those who have preceded me in this place, and call to mind their splendid services to the institute, to the Commonwealth, and to the country, I accept this work with a feeling of great humility, but with the earnest hope that through our common effort the institution may grow not only in strength but in usefulness; not only in facilities for work but in the better understanding of what work means; and that it may ever seek to lead in all that concerns the rational and helpful teaching of applied science.

Gentlemen of the instructing staff, for the cordial welcome to your number I am most grateful. I come to you with no new message and as the herald of no new gospel. The same spirit of work and of devotion which has been the glory of your body in the past must be our source of strength for the future. In all that leads to the uplifting of technical education, in the development and extension of the work of the institution, in the suggestion of new means by which it can minister more directly to the work of education upon the one side and to the promotion of scientific research upon the other, I ask your hearty cooperation and assistance. An institution, like an individual, if it is to minister to a growing civilization, must grow in its experience, in its appreciation of truth, in comprehension of the meaning of art and of science and of life. The inspiration which shall stand behind this growth must rest, in large measure, upon your zeal and your effort.

Alumni of the institute, to each of you has been sent an invitation to this gathering. These missives have gone to every country and to every climate. Some are at this moment being borne on the backs of men or on snow sledges to the interior of Alaska, to be read months hence amid the winter snows. Some will be read in the tropics, under the glare of a summer sun. Your alma mater would gladly have welcomed each one of you this day to her fireside, though the fare be frugal and the feast modest. Since this can not be, let her invitation carry at least this suggestion: How far soever from her halls your path may lead, it can never take you beyond the circle of her affection. The institute is proud of the men she has sent forth, and she counts upon their loyalty and their devotion. She invites your counsel, your suggestion, your friendly criticism, your help. And, while she listens with willing ear
to every voice which rings true, she asks you to remember that no greeting so thrills her as that which comes up from one of her own children who is doing a man's work in the world.

Students of the institute, in a more real sense than any other body you are the Institute of Technology. As such I salute you to-day, and assure you not only of my earnest wish for your advancement and your success, but also of my desire for your friendship and for your help. I prefer to think of such an institution as that in which we work together not as an empire governed by the few, but as a republic in which faculty and students alike are charged with the government of the whole body.

I congratulate you in taking up the study of engineering, using that term in the broadest sense. There was never a more opportune time to enter such work, nor was there ever a period in the history of our country when the trained engineer found open before him so attractive a field. This is the day of the trained man, and to him the responsibilities and the rewards will go. To the American engineer a whole series of new problems of the highest interest has in recent years been presented. Railways are to be built, canals are to be cut, a whole empire of desert land is to blossom under his hand. The Pacific Ocean and the countries which border upon it are to be the theater of an enormous development. Cables will be laid, cities will be developed, the tropics will be subdued. In all this development the trained engineer is to play a rôle that he has never yet played since civilization began. The next quarter century is to belong preeminently to him, and in all these world problems and world enterprises you are to share. May I hope that in your Preparation you may bear in mind as your ideal of an engineer, not only one who works in steel and brick and timber, but one who by the quality of his manliness works also in the hearts of men; one who is great enough to appreciate his duty to his profession, but likewise, and in a larger and deeper sense, his duty to a common country and to a common civilization.

## OIIO.

## JOHN BERNARD STALLO, AMERICAN CITIZEN, JURIST, AND PHILOSOPHER. ${ }^{1}$

By Thomas J. McCormack.

On January 6, 1900, there died at Florence, Italy, in the person of John Bernard Stallo, a distinctive type of our best American citizen-a man who, despite signal achievements in professional and public life and in the domain of philosophic thought, has, either from his own inherent modesty or from our inveterate national lack of appreciation for such talents, not yet attained to the reputation which is his due.

John Bernard Stallo passed the years of his early manhood, as well as thuse of his maturest activity, in America; and we may, without disparaging in the least either the impulse which his sound youthful education in Germany gave him or the extraordinary advantages which his acquaintance with the German language and with German intellectual traditions lent him over most of his contemporaries, still characterize him as essentially a product of American conditions. At 17, a poor teacher in a private school in Cincinnati; at 21, professor of mathematics, physics, and chemistry in St. John's College, Fordham; at 24 , a member of the bar of Cincinnati; at 31 , a judge of the court of common pleas of Hamilton County, Ohio, he successively rose to positions of increasing eminence in his city and country, culminating in 1885 in his appointment by President Cleveland as United States minister
to Italy. In addition to this, he is the author of the profoundest and most original work in the philosophy of science that has appeared in this country-a work which is on a par with anything that has been produced in Europe-and which showed a firm and independent grasp of what are now acknowledged principles of scientific criticism at a time when these were not in the possession of the majority of scientists. And all this varied activity is rounded off by the picture of the life of a man of sterling culture wielding an unobtrusive but persistent influence for the social and intellectual good of the community of which he was a part, and which has since borne a distinctive impress of that influence.

John B. Stailo was born in Sierhausen, Oldenburg, Germany, on March 16, 1823. He came of sturdy Frisian stock, which had produced a long line of schoolmasters, and himself received at Vechta his official education for that career. He was precocious, and at 16 was sufficiently conversant with elementary mathematics, the ancient and the modern languages, to fit him for entrance into the university. Waiving this career, he emigrated in 1839 to America and settled in Cincinnati, where he found occupation as a teacher and published the first offspring of his genitis in the shape of a spelling and reading book of the German language, afterwards characterized by him as his most brilliant literary success. We soon find him at St. John's College, Fordham, where he first was a teacher of German and the classics, and in 1843 was made professor of mathematics, physics, and chemistry, a position which he held until $18 \pm 7$, when he returned to Cincinnati and studied law, being admitted to the bar in 1819.

It was in this period, by his comprehensive studies in mathematics and the sciences, that he laid the foundation of his philosophical career, to which he remained true amid all the preoccupations of his professional life. Even here, through the unaided insight of his natural genius, it was the works of the great masters only to which his energies were directed, and to this rare economy and selective judgment which he exercised in all his labors are, in our opinion, due not only the great range and variety of his humanistic accomplishments but also the historical breadth and critical acumen which so eminently distinguished his philosophical researches.

His first philosophical work, which, like Hume, he subsequently repudiated as "one of the unavoidable đisorders of intellectual infancy," and which will doubtless also have the same fate as Hume's philosophical firstling, of being regarded by subsequent historians of $A_{\mathrm{m}}$ merican philosophy as the true and original expression of his views, was a book entitled General Principles of the Philosophy of Nature, with an Cutline of its Recent Developments among the Germans, embracing the Philosophical Systems of Schelling and Hegel, and Oken's System of Nature, published in Boston in 1848. Be the merit of this work what it may, it did not altogether fail of an influence upon American thought. There were here recorded a digest of the views of many German philosophers who were at that time a sealed book to most American readers, and even that part of it of which its author by his own implicit expression was "ashamed" may have possessed an import of which he was totally unaware. To his great philosophical work, The Concepts and Theories of Modern Physics, the fruit of a lifetime of thought, we shall refer in more detail at the end of this notice.

We now turn to his career as a citizen, professional man, and publicist, proper, which exhibits traits that are more likely to endear him to our national consciousness. His life in this regard has been too well characterized by the late ex-Governor Körner in his book, The German Element in America, to require much supererogatory comment on our part. Ex-Governor Körner, too, was a signal embodiment of German traditions and European culture in the West. Judge Stallo and he were congenial spirits; both were chosen as types of our so-called German-American citizens for representing America at foreign courts; and for an appreciation of this phase of Stallo's career we can do no better than to call attention to Körner's work, which is distinguished alike by its humanitarian breadth and by its literary qualities.
"Judge" Stallo, for such he became in 1853, enjoyed for upward of thirty years a very lucrative law practice in Cincinnati, and his home was one of the social, intellectual, and artistic centers of that city. He was a lover of music and belles-lettres and a wide reader of history and political science. He rarely entered the arena of practical politics, but in great national and local crises his pen and his voice were always enlisted in the service of high, liberal, and progressive ideals. It was thus in 1865, thus in 1876, in 1880, and in 1892; and thus with the taxiff, civil service, and political reform generally on many other occasions. We have in his latest work, Reden, Abhandlungen und Briefe (New York, E. Steiger \& Co., 1893), a charming picture of this side of his career.

The essay on Thomas Jefferson in this volume breathes an air of unwavering confidence in the future of our country at a time when many were despondent (1855), and it also exhibits a grasp and appreciation of our political institutions that was, and even still is, rare. The same breadth and profundity marked-his utterances on such questions as the future of the English language in America, the reading of the Bible in the public schools, Know-Nothingism in the public schools, and instraction in German in public schools. On all these burning issues Stallo appealed to the reason of his hearere, not to their prejudices, and so lifted his discussion to the planes of national dignity and the intrinsic forcefulness of truth. So confident was he of the cultural mission of German thought and sentiment in the United States that the steadily increasing predominance of the English language never so much as even threatened that mission, in his estimation. He referred to the famous utterance, "I had rather make a nation's songs than its laws," and added, "Whatever language our children shall speak in the centuries to come, they and the descendants of the Anglo-Americans shall sing the melodies of our fathers, the light of German science shall beam from their eyes, and the glow of German sentiment incarnadine their cheeks. * * * The lyre is a more glorious symbol of national happiness than the steam engine * * * and it is as magnificent a calling to keep the hearts of a free people responsive to the quickening lessons of genuine poetry as it is to gather and to hoard the golden fruits of industry."

This breadth and independence of view marked all his actions and was the source of his great influence. He was never led by fixed social opinions, and changed his politics several times in life, in conformity with his own purely rational convictions. He was the champion of freedom of thought and action in all its forms, and his main juridic laurels were won in connection with cases where liberal issues were concerned. This trait, says a writer in the Popular Science Monthly for February, 1889, "was strikingly manifested in his presiding over a public meeting addressed by Wendell Phillips, when the orator was made a mark for missiles, and Judge Stallo stood by his side and bore the brunt of the assault with him. This was in 1862, when Mr. Phillips was invited to speak in Cincinnati in favor of emancipation. A bitter prejudice existed against him because he had been a disunionist. Judge Stallo had been invited to introduce him, but declined, because, his sympathies never having been with Mr. Phillips, he was not the proper man to perform that office. But when he was informed that other men whom he had mentioned as more suitable had declined, because they were afraid of a mob, he consented, saying, 'That is enough, gentlemen; I will be there.' Mr. Phillips, after being introduced, was at once assailed with a shower of disagreeable and dangerous missiles. One of them hit Judge Stallo. 'During the turmoil and uproar,' said Judge Stallo, telling the story several years afterwards, 'Mrs. Stallo, with Mrs. Schneider, sat behind a fellow who had risen and aimed a big stone at the speaker. As he threw his hand back to fire the stone Mrs. Stallo, who entered heart and soul into the spirit of the hour, and had no thought but to stand by her friends in the stormy crisis, reached over and hit the fellow's wrist a hard blow, making him drop the stone and howl with pain. He
looked around to see his assailant, and Mrs. Stallo was up and ready for him, but gentlemen hastened to her side, and the fellow moved away."

Judge Stallo took a pronounced stand in the political movement of 1884, and was sent in the following year as United States minister to the court of Rome. After the expiration of his official term he took up his residence in Florence. Surrounded with the art, the learning, and the culture which had been the dream of his youth, and in correspondence with eminent thinkers of Europe on topies that had formed the subject of his philosophical contemplations, his life drew fittingly to a close in an ideal atmosphere and with ideal tasks done. He left a widow and two children, Miss Hulda Stallo, of Florence, Italy, and Mr. Edmund K. Stallo, of Cincinnati. His great work, The Concepts and Theories of Modern Physics, constitutes his most enduring title to fame, and we shall therefore devote a few brief paragraphs to its characterization.

Judge Stallo did not claim for his work the significance of "a new theory of the universe, a novel system of philosophy." "I have undertaken," he says, "not to solve all or any of the problems of cognition, but simply to show that some of them are in need of being stated anew so as to be rationalized, if not deepened. * * * The utter anarchy which notoriously prevails in the discussion of ultimate scientific questions, so called, indicates that a determination of the proper attitude of scientific inquiry toward its objects is the most pressing intellectual need of our time, as it is an indispensable prerequisite of real intellectual progress at all times."

The book is thus on the face of it a contribution to epistemology, or the theory of cognition, as based upon a careful study of the physical sciences. It controverts the belief that there has been a total breach of continuity in the philosophy of science from medieval times to the present day; that "modern physical science has made its escape from the cloudy regions of metaphysical speculation, discarded its methods, and emancipated itself from the control of its fundamental assumptions." On the contrary, it holds that "the prevailing misconceptions in regard to the true logical and psychological premises of science are prolific of errors, whose reaction upon the character and tendencies of modern thought becomes more apparent from day to day."

But, while a book of philosophy, it is not a book of "metaphysics," in the old sense. Indeed, "its tendency is throughout to eliminate from science its latent metaphysical elements, to foster and not to repress the spirit of experimental investigation, and to accredit instead of discrediting the great endeavor of scientific research to gain a sure foothold on solid empirical ground, where the real data of experience may be reproduced without ontological prepossessions."

It begins with an attack upon that conception of modern physical science which "aims at a mechanical interpretation of the universe," and considers successively both the history and the principles of the mechanical philosophy in all the forms of its expression; the doctrines of mass, inertia, energy, the atomic constitution of matier, the kinetic theory of gases, etc.; interpolates several chapters on the development of a theory of knowledge, and ends with the critical application of the principles of that theory to the metaphysical assumptions involved in the mechanical philosophy and the mathematics of the metageometricians.

One is astonished in reading this work, not only that so vast a range of scientific and philosophical knowledge could be covered by a man actively and continuously engaged in the profession of the law, but also that so acute and original critical powers could be developed in an atmosphere so uncongenial to this species of inquiries. While Judge Stallo's book is well known in America, it has not had the notice it deserves in Europe. It has much in common with recent developments of thought there, and the coincidences of its general points of view with Professor Mach's philosophy are especially remarkable, as each system was developed independently of the other, and each thus offers a welcome corroboration of the other.

It is, in fine, safe to say not only that the influence of Stallo's work will be a permanent one, but that it will also steadily increase, despite the fact that many of the doctrines it attacks are being gradually abandoned.

Attention should be called, in closing, to the philosophical essays which Judge Stallo wrote in German, and which have been published in his collection of Reden, Abhandlungen, etc., mentioned above. These essays, which treat of such subjects as "Materialism" and "The fundamental notions of physical science," are marked by the same qualities of thought as the author's principal work, but they are written in a lighter vein and are pervaded with a humor that will insure them a more permanent place in the affections of the German readers of America, and so render accessible to them also the more important side of the intellectual character of this unique figure of our national life.

## DR. ISAAC M. WISE.

It was with deep regret that the citizens of Cincinnati and of the State of Ohio, as well as Israelites all over the world, heard of the death, early in 1900, of Dr. Isaac M. Wise, of Cincinnati. He was the nestor of Jewish rabbis in America, and as pastor of the B'ne Jeschurun congregation was for a great number of years the protagonist of reformed Judaism in the West. His activity, however, was not limited to the pulpit, for he was also the author of a number of books and pamphlets and was greatly interested in the theoretical problem of religion. He was a member of the city board of examiners in the schools of Cincinnatifor many years and the staunchest supporter of the common schools. He was the founder of the Hebrew Union College and had been its president since 1875. He also founded, and was until his death president of, the Central Conferonce of American Rabbis. He founded the American Israelite and The Deborah and edited both to the last. Dr. Wise was within a few days of his eighty-first birthlay.

## TENNESSEE.

## PLEA FOR THE HIGHER EDUCATION OF THE NEGRO.

From the Inter-Ocean (Chicago), May 27, 1800-Report of an interview with the Rev. Dr. J. G. Merrill, dean of Fisk University.

*     * In a speech at Washington two weeks ago Charies Dudley Warner took the ground that higher education is doing the negro more harm than good, and declared that increasing idleness and lawlessness among the negroes is due to false ideas of education. He also intimated that industrial training, with a knowledge of the elementary branches and moral instruction, are the only methods by which the masses of the negro race can be expected to improve in character and usefulness.

Mr. Wamer's remarks have stirred up Southern educators in schools for colored people to vigorous protest. Dr. Merrill is the head of what is perhaps the most important advanced school for negroes in the South-Fisk University, at Nashville, Tenn. He has had a long experience in teaching negro people, and he dissents from all of Charles Dudley Warner's propositions, with one exception. He heartily indorses industral education, but he holds that a negro has just as much need as a white man to go beyond the rudiments of learning.
"I think that Mr. Warner was talking without knowledge of his subject," said Dr. Merrill to a reporter for the Sunday Inter-Ocean. "There is nothing so convincing as figures, and I can give statistics from Fisk University which completely upset Mr. Warner's theory. Facts are a good deal better than theories, especially when you deal with the human equation.

GOOD RESULTS AT FISK UNIVERSITY.


TEEXAS.

## MEMORABLE DECLARATIONS RELATING TO EDUCATION.

By President William L. Prather, of the University of Texas.
In the Texas Declaration of Independence we find among the grievances stated against Mexico this language:

It has failed to establish any public system of education, although possessed of almost boundless resources (the public domain), and although it is an axiom in political science that unless a people are educated and enlightened it is idle to expect the continuance of civil liberty or the capacity for self-government.

This declaration concludes with these words:
Conscious of the rectitude of our intentions, we fearlessly and confidently commit the issue to the Supreme Arbiter of the destinies of nations.

Fifteen days after that declaration the first constitution of the Republic of Texas was signed, in which this language was used:

It shall be the duty of Congress, as soon as circumstances will permit, to provide by law for a general system of education.

At the third session (in 1839) of the Congress of the Republic of Texas, after independence had been achieved, Mr. Cullen, in a masterly report, urged that provision be made for an educational system embracing the common schools and institutions of higher learning, and after referring to the fact that the failure of the Mexican Government to make provision for the education of the children of Texas had been one of the grounds for breaking away from the Mexican Government, asked what the standing of Texans would be in the eyes of mankind if they did not redeem the duty implied in their Declaration of Independence.

President Lamar, in his great message to the Texas Congress in 1839, urging the establishment of a general system of education throughout the Republic, with a university at its head, used this language:
Cultivated mind is the guardian genius of democracy, and while guided and controlled by virtue is the noblest attribute of man. It is the only dictator that freemen acknowledge and the only security that freemen desire.

In response to this message the Congress of 1839 passed an act providing for a general system of education throughout the Republic, and providing for two colleges or universities, and set apari to each county then organized, or thereafter to be organizel, 3 leagues of land, and 50 leagues for university purposes.
Senator Wigfall, in a splendid report to the legislature of Texas in 1858, urying the establishment of one university instead of two colleges or universities, used this language:

By establishing a university instead of a college great advantage will be offered to all-both the rich and the poor. No particular course of study will be prescribed, no Procrustean rule eatablished; no impracticable efforts will be made to prepare all for every pursuit in life, but each may be fitted for any he may desire.

To establish even one university which will be of any practical benefit to the people the outlay must be large. What is called economy is often extravagance in disguise. Parsimony is always so. * * * What is worth doing at all is worth doing well. Niggardliness is not good husbandry. State pride forbids the establishment of an institution not commensurate with the vast resources of the State. The lectures should be free to all citizens of the State. No monopoly of learning should be secured to wealth. The funds we are appropriating were purchased by the blood of the heroes of our revolution. Your committee would regret to see the descendants of one who perished at Goliad or in the Alamo excluded from an institution of learning founded by the State from the very fund furnished by his blood, into which the son of a fortunate land speculator could buy his way. Texas should be a unit. No friendships are as lasting as those formed in early youth, no ties so binding as those of college life. The chum is a brother, not of accident, but of choice.

Then let us bring our youth from the east and the west, from the north and the south, and, educating them at one common institution, teach them to feel that they are Texans. When their hearts are most susceptible to impressions, allow them to form frieudships, which will last with life. When they meet upon the great theater of action let them meet like brothers. Texas came into the Union as an empire. Let her remain in it as an empire or go out of it as an empire. Virginia, when the empire State, furnished protection to her sisters of the South. She has been overshadowed by New York. Let Texas take her place. Under her guidance the South will be safe-the Union will be safe.

Free and universal education is the only foundation upon which "a government of the people, by the people, and for the people" can surely rest.

It is because it is "a government by the people and for the people" that the right exists to tax the rich for the education of the poor.

The protection of the life, liberty, and property of the rich as well as the poor is necessarily committed to the hands of the people in a government administered by the people.

## CHAPTER XXVII.

## CONSULAR REPORTS. ${ }^{1}$

## NOBEL PRIZES FOR SCIENTIFIC DISCOVERIES.

The State Department has received a note from the legation of Sweden and Norway, dated Washington, September 11, 1900, inclosing copy (in French) of the laws and regulations relating to the Nobel bequest. The first award will take place December 10, 1901. A summary of the inclosure (printed by L'Imprimerie Royale, P. A. Norstedt \& Söner, Stockholm, from whom copies can doubtless be obtained) follows:

LAWS AND REGULATIONS.
The three corporations awarding the Nobel prizes are:
(1) The Royal Academy of Sciences, at Stoctholm, founded in 1739. The King is the protector of the academy, which numbers 100 Swedish and Norwegian members and 75 foreign members.
(2) The Swedish Academy, at Stockholm, instituted in 1786. The King is the protector. The members, exclusively Swedish, are Iimited to 18.
(3) The Carolin Insticute of Medicine and Surgery, at Stockholm, established in 1815. The number of professurs is 22.

OBJECT OF TसE ENDOWMENT.
The Nobel endowment is based on the will of Dr. Alfred Bernhard Nobel, engineer, drawn up November 27, 1895. The stipulations are as follows:
"The remainder of the fortune which I shall leave shall be disposed of in the following manner: The capital, converted into safe investments by the executors of my will, shall constitute a fund, the interest of which shall be distributed annually, as a reward to those who, in the course of the preceding year, shall have rendered the greatestservices to humanity. The sum total shall be divided into five equal portions, assigned as follows:
"(1) To the person having made the most important discovery or invention in the department of physical science.
"(2) To the person having made the most important discovery or having produced the greatest improvement in chemistry.
"(3) To the author of the most important discovery in the depariment of physiology or of medicine.
"(4) To the author having produced the most notable literary work in the sense of idealism.
"(5) To the person haring done the most, or the best, in the work of establishing the brotherhood of nations, for the suppression or the reduction of standing armies, as well as for the formation and the propagation of peace conferences.
"The prizes will be awarded as follows: For physical science and chemistry, by the Swedish Academy of Sciences; for works in physiology or medicine, by the Carolin Institute of Stockholm; for literature, by the Academy of Stockholn; finally, for the work of peace, by a committee of five members, elected by the Norwegian Storthing. It is my expressed will that nationality shall not be considered, so that the prize may accrue to the most worthy, whether he be a Scandinavian or not."

The testamentary stipulations above cited serve as a basis for the regulations relating to the Nobel endowment, together with the explanations and the more detailed

[^34]provisions contained in the present law, as well as in the deed of compromise, amicably brought about June 5, 1898, with certain of the heirs of the testator, and according to which the said heirs after an agreement concluded on the subject of a less important portion of the property left by Dr. Nobel, declared that they accepted the will of Dr. Nobel and renounced in all contingencies, for themselves and for their descendants, all claim for the remainder of the succession of the caid Dr. Nobel and all share in the administration of the legacy; they abandoned, also, all right to protest against the interpretations or additions to the will or other limitations relative to its execution, and to the employment of the capital which might be now, or in the future, made by decisions of the King or by competent authorities. The following reservations are, however, expressly stipulated:
(a) That the common law for all the authorities charged with the distribution of the prizes, and governing the manner and the conditions of the distribution, prescribed by the will, must be drawn up by common consent, with a representative delegated by the family of Robert Nobel, and submitted to the approval of the King.
(b) That the following principles can not be deviated from, viz:
(1) That each of the annual prizes established by the will must be awarded at least once in the course of every period of five years, commencing with the year immediately following that in which the Nobel endowment shall enter on its functions, and that the sum total of a prize thus awarded shall in no case be less than 60 per cent of the part of the yearly revenues, disposable for the distribution of the prizes; neither can it be divided into more than three prizes at the most.
(2) By the title "Academy of Stockolm" written in the will is understood the Swedich Academy.

By the word " literature" must be understood not only wor"s purely literary, but also any other writing possessing ly its form and its style a literary value. The limitation of the will declaring that the annual distribution of prizes must be directed to works executed "in the course of the preceding year" must be interpreted in this sense; that the objects of the rewards shall be the most recent results of research displayed in the departments indicated by the will; older works will be considered only in the event that their importance shall have been demonstrated in recent times.
(3) In order to be admitted to the competition, every written work must have been published by means of the press.
(4) The sum total of a prize may be divided equally between two works, if it be judged that each of them has merited the prize. If the work rewarded is the work of two or of several assistants, the prize can be awarded to them in common. Any work the author of which is deceased can not be the object of a prize; however, in case of death after the proposal for a reward has already been presented in the prescribed forms the prize may be awarded. Each one of the corporations having the conferring of prizes has the right to decide whether the prize may be adjudged to an institution or to a society.
(5) According to the plain intention of the will, a work can not be rewarded unless experience or a competent examination shall prove its preponderant importance. If none of the works submitted to the competition possess the quality desired, the sum total of the prize is reserved for the following year. If, then, the prize can not be distributed, the amount is deposited in the principal funds, unless three-fourths of the persons voting shall decide to establish with it a special fund for the section. The revenues of such a fund may, according to the decision of the corporation, be employed to encourage, otherwise than by the distribution of prizes, the tendencies aimed at in the first place by the donor. Each special fund will be administered with the principal fund.
(6) For each section of Swedish prize, the competent corporation shall designate a "Nobel committee," composed of three or five members, who shall give their advice upon the conferring of the prize. The necessary examination for the awarding of the peace prize shall be made by the committee of the Norwegian Storthing mentioned in the will. In order to be named a member of a Nobel committee, it is not necessary to be a Swedish subject nor to belong to the corporation charged with the conferring of the prize. The members of a Nobel committee can receive a suitable fee for their work, which will be determined by the competent corporation. In a special case, if it is judged necessary, the corporation can designate a competent person to take part as a member in the deliberations and in the decision of the Nobel committee.
(7) For admission to the competition, it is necessary to be proposed in writing by a qualified person. No attention will be paid to requests addressed by persons desiring to obtain a prize themselves. It is explained further on who are considered qualified. The annual competition considers proposals which have been offered in the course of the year immediately preceding up to the date of February 1.
(8) Every proposal must be accompanied by the writings and other documents upon which it is founded. If the proposal is not drawn up in either one of the Scandinavian languages or in English, French, German, or Latin, or if, for the appreciation of the proposed work, the body having to award the prize finds itself, for the most part, obliged to take cognizance of a writing composed in a language whose interpretation would cause special difficulties or considerable expense-in either of these cases, the corporation will not be obliged to proceed to a detailed examination of the proposal.
(9) At the solemn reunion, which takes place on the anniversary of the death of the donor, December 10, the corporations will make known publicly their decisions and bestow upon each laureate a check for the value of the prize, a diploma, and a gold medal bearing the effigy of the donor with an appropriate legend. The laureate is obliged, unless prevented, to give during the six months following the reunion a public lecture on the subject of the work crowned. This lecture will be given in Stockholm, or for the peace prize, in Christiania.
(10) Decisions in regard to the awarding of prizes are without appeal. It is forbidden to insert a difference of opinion in the procès verbal, or to reveal it in any other manner.
(11) Corporations have the right to establish scientific institutions and other establishments, in order to secure assistance for the examination which must precede the distribution of the prizes, and to serve, from other points of view, the aim of the endowment. These institutes and establishments, which form part of the endowment shall be called "Nobel institutes."
(12) Every Nobel institute is placed under the direction of the body which founded it. They are independent as regards their exterior situation and their finances; consequently their revenues can not be utilized by the corporations awarding the prizes nor by any other institution to cover the expenses of their private budgets. Professors having a fixed salary in a Nobel institute can not hold a like position at the same time in any other institution, unless by special authorization of the King. Corporations may install Nobel institutes on a common site, giving them a uniform organization; they can attach foreigners, men and women, to the institute.
(13) One-fourth of the revenues of the principal fund, which each section disposes of annually, is reserved. After the payment of the immediate expenses for the distribution of the prizes, the rest of the amount reserved is employed in defraying the expenses of the Nobel institute in each section. The balance, after paying the expenses of the year, is set aside for the future needs of the institute.

MANAGEMENT OF THE ENDOWMENT FUND.
The board of administration is composed of five Swedish members, one of whomthe president-is named by the King; the others are chosen by representatives of the corporations. The managing director is chosen by the board from among its own members. Members and substitutes are elected for a term of two years, commencing May 1. The board of administration manages the endowment fund and all property common to the sections, pays the prizes and the expenses attendant on their distribution, the expenses of the Nobel institutes, engages all employees, determines the amount of their appointments and of their pensions, is empowered to appoint proxies, to prosecute and to answer, to plead and to act in the name of the endowment. The corporations awarding the prizes appoint fifteen representatives for two civil years. The Academy of Sciences chooses six and designates four substitutes; the other corporations each appoint three, with two substitutes. The representatives, called together by the oldest representative of the Academy of Sciences, elect one of their number as president. Nine votes, at least, are necessary to make a decision. A corporation failing to send representatives does not prevent the others from acting. The management and accounts of the board are examined every civil year by five examiners; each corporation appoints one, the King naming the fifth, who acts as president. The report upon the management must be given to the president before the end of February. The examiners must present their report to the representatives of the corporations before April 1. This report, giving a résumé of the employment of the different funds, will be published in the newspapers. The failure of any corporation to appoint an examiner, or of an examiner to act, does not prevent the other members from proceeding with the examination. Examiners, and also the head of the department of publicinstruction and worship, have free access to all books, accounts, and documents of the endowment.

All the investments of the fund must be examined and verified at least once a year. The representatives of the corporations have the right to decide, after the
report of the examiners, whether the board of administration or any one of its members shall be discharged, or any other action taken against them. The King determines the salary of the managing director. The tenth part of the yearly net income of the principal fund is added to the capital; the interest of the sum destined for the prizes is aded to the same fund until the distribution in prizes or otherwise.

## TRANSIENT PROV1SIONS.

Immediately after the approval of the King of the statute of endowment, the corporations will designate the stipulated number of representatives, who will assemble at Stockholm and elect the members of the board of administration, who will have the management of the endowment fund at the beginning of the year 1901. The executors of the will will take appropriate measures to terminate the settlement of the succession. The first distribution of prizes for all sections will take place, if possible, in 1901. From the endowment resources will be deducted: First, a sum of 300,000 crowns $(\$ 80,400)$ for each section-that is, $1,500,000$ crowns $(\$ 402,000)$ in all-which, with the interest commencing from the 1st of January, 1900, will be used to cover, in proportion, the expenses of the organization of the Nobel institutes in addition to the sum the board of administration shall judge necessary for the acquisition of a special site destined for the administration of the endowment and including a hall for its meetings.

SPECIAL RULE GOVERNING THE AWARDING OF THE NOBEL PRIZES BY THE ACADEMY OF SCIENCES, ETC.

The right of presenting proposals for prizes belongs to -
(1) Native and foreign members of the Royal Academy of Sciences.
(2) Members of the Nobel committees for natural philosophy and chemistry.
(3) Professors who have received the Nobel prize of the Academy of Science.
(t) Ordinary and extraordinary professors of natural sciences and chemistry in the universities of Upsal, Lund, Christiania, Copenhagen, and Helsingfors, in the Carolin Institute of Medicine and Surgery, the Royal Superior Technical School, as well as to the professors of the same sciences in the Stockholm University.
(5) Incumbents of corresponding chairs of at least six universities, which the Academy of Science will select, taking care to divide them suitably between the different countries and their universities.
(6) Learned men, to whom the academy shall judge proper to send an invitation to this effect.
The invitations shall be sent every year in the month of September. Proposals for the prize must be made before February 1 of the following year. They are classified by the Nobel committee and submitted to the college of professors. The Nobel cominittee decides which of the works presented shall be submitted to a special examination. The college of professors will pronounce definitely on the distribution of the prize in the course of the month of October. The rote is taken in secret; if necessary, the question may be decided by drawing lots.

SPECLAL RULE GOVERNIFG THE AWIRDING OF THE NOBEL PRTZE BY THE SWEDISH ACADEMY, ETC.

The right to present candidates for the Nobel prize belongs to the members of the Swedish Academy, the French Academy, and the Spanish Academy, which resemble the Swedish Academy in their organization and aim; to the members of the literary departments of other academies, as well as to the members of literary in-titutions and societies analogous to academies; to professors of æsthetics of literature and of history in the universities. This order must be published at least every five years.

## NOBEL PEACE PRIZE.

The department is informed by the Nobel committee, elected by the Norwegian Storthing and charged with the bestowal of the Nobel prize destined for "the person having done the most, or the best, in the work of establishing the brotherhood of nations, for the suppression or the reduction of standing armies, as well as for the formation and the propagation of peace conferences," that presentation of candidates
for the prize must be made before the 1st of April next. According to the regulations, every proposal must be accompanied by the writings and other documents upon which it is founded. For admission to the competition, it is necessary to be proposed in writing by a qualified person. Letters of proposal should be addressed to the Norwegian Nobel Committee, Victoria Terrasse, 3, Christiania, Norway.

## EDUCATIONAL PROGRESS IN EASTERN SIBERIA.

THE INSTITUTE FOR EASTERN LANGUAGES AT VLADIVOSTOCK.
On November 2 (October 21, 1899) the new Institute for Eastern Languages was dedicated with appropriate ceremonies. This institute is an important part of the programme which Russia is carrying forward in the East. The study of eastern lan-guages-Chinese, Japanese, and Korean-is all important, and these are to be undertaken by the brightest pupils from the local gymnasiums, and even by those who are not graduates of any gymnasium. ${ }^{1}$ Russians are proverbially talented as linguists, and there are few educated persons who can not converse fluently in French or German, generally in both. But Chinese, Japanese, and Korean are difficult in themselves, and these difficulties are enhanced by the divergence of provincial dialects.

Great care has been exercised in the selection of the institute head, and his corps of assistant professors; all are young men, except the director, Professor Pozdnioff, a gentleman of ripe experience and thoroughly informed as to the scope and magnitude of his work.

For the current year 30,000 rubles $(\$ 15,390)$ are appropriated for the gymnasium, and 10,000 rubles $(\$ 5,130)$ for furniture and educational appliances. For the Eastern Institute, the initial appropriation is 77,000 rubles $(\$ 39,501)$ for all purposes; so that hereafter Vladivostock may look forward to an appropriation of from 100,000 to 120,000 rubles ( $\$ 51,500$ to $\$ 61,800$ ) for higher educational work, a very creditable showing on the part of the Imperial Government.

The dedicatory exercises of the Eastern Institute were on the order of the usual beginning, or "commencement," of an American college. The large hall was decorated with plants, flags, flowers, bannexs, and streamers. The portraits of the Emperor and Empress occupied a conspicuous place above the head of GovernorGeneral Grodekoff. The audience was the most brilliant I have seen in this city, and there was a marked absence of that formality so usual in Russian official gatherings. The archbishop of eastern Siberia, assisted by six priests and acolytes, first performed a solemn service by which the school was consecrated to the service of the Pravoslavian Church. Then the imperial decree authorizing the school was read, followed by an address on the languages of the East in Russia for the last three hundred years, by V. P. Margaritoff, and an address on the history of the Eastern Institute, by N. P. Taberio.

On November 1 the institute opened. The professor of English is an American citizen, Mr. Lugobil. He became an American citizen by choice when we acquired possession of Alaska, in 1867. He was for a time a resident of San Francisco, but has been here for ten years. He is also instructor in English in the local gymnasium. Professor Lugobil is an exellent linguist.

Considering the peculiar formation of this seaboard province, extending from $100^{\circ}$ to $166^{\circ}$ longitude east of Poulk of ( $140^{\circ}$ to $170^{\circ}$ east of Greenwich) and comprising the Amur district, the island of Sakhalin, the Kamchatka Peninsula, and the Anadyr and Commander islands, with only five cities, many mere settlements, and a varied

[^35]population, the educational exhibit is very creditable, as the following official figures will illustrate:
The total number of public schools in 1897-98 was 116.
At Habarofsk.-Preparatory school for the Siberian cadet corps; technical school (railway) ; town school for boys, course two years; a school for girls; gymnasium for girls; parish or church school.

At Vladivosiock.-Classical gymnasium for boys; gymnasium for girls; town school for boys, three years' course; first elementary school; second elementary school; school for the naval department; the Alexandrof School (military); the Russian Chinese school (city) ; parish church school.

At Nikoluefsk.-Town school for boys, three years; parish church school.
At olkhotsk. -Parish church school.
At Fetrapaulofsk.-Town school for boys and girls.
In South Ussuri district.-Forty country and parish schools.
In the Habarofsk district.-Seven country and five missionary schools.
In the Oodst district.-Seven country schools.
In the Orhotsk district.-One school for the Tungusees and one parish church school.
In the Petrapaulofsk district.-Eight church schools.
In the Gijinsk district.-One parish church school.
In the Anadyr district.-One parish church school.
On the Commander Islands.-Two country schools.
In 1897-98 the number of schools showed an increase of 10 and the number of pupils an increase of 755 , as compared with the statistics of the previous year.
The following table shows the number of schools and the Russian population:

| Towns and districts. | $\begin{aligned} & \text { Popula- } \\ & \text { tion. } \end{aligned}$ | Number of schools. | Number of schools according to population in 1897-98. |
| :---: | :---: | :---: | :---: |
| Vladivostock. | 17,279 | 9 | 1,920 |
| Habarofsk. | 11,227 | 7 | 1, 604 |
| Nikolaefsk | 4,492 | 2.40 | 2,246 |
| District of South Ussuri | 88, 493 | 40 | 2,212 |
| District of Cossack Ussuri | 17,756 | 23 | 772 |
| District of Habarofsk. | 11,750 | 12 | 980 |
| District of Oodsk | 12,075 |  | 1,725 |
| District of Petrapaulofsk | 8,400 | 9 | ${ }^{933}$ |
| District of Gijinsk. | 7,571 | 1 | 7,571 |
| District of Okhotsk. | 4,810 | 3 | 1,603 |
| District of Anadyr . ${ }_{\text {District }}$ of Commar | 12,425 | 1 | 12, 425 |
| District of Commander Island | 652 | 2 | 326 |

The following shows the number of children of school age between the ages of 7 and 12 and 14 and 17. According to the statistics the number of children received into the schools equals 15 per cent of all the Russian population:

| Towns and districts. | Number of pupils. |  | Percentage ot children in schools in 1897-93. |
| :---: | :---: | :---: | :---: |
|  | Between ages of 7 and 12. | Between ages of 14 and 17. |  |
| Vladivostock. | 2,586 | 690 | 26.7 |
| Habarofsk.... | 1,745 | 590 | 33.8 |
| Nikolaefsk .............. | 641 | 112 | 17.3 |
| District of South Ussuri | 12,156 | 1,388 | 11.4 |
| District of Cossack Ussuri | 1,901 | 653 | 34.3 |
| District of Habaroisk.. | 1,688 | 239 | 14.1 |
| District of Oodsk | 2, 244 | 202 | 9 |
| District of Okhotsk | 711 | 48 | 6.7 |
| District of Petrapaulofsk | 1,331 | 155 | 11.8 |
| District of Anadyr....... | 1,845 | 53 | 2.8 |
| District of Commander Islands | 102 | 102 | 100 |

In Vladivostock evening classes were begun in the autumn of 1898 for the study of Chinese and English; they have been continued during the present winter and have met with reasonable success. The Chinese classes have been transferred to the Institute for Eastern Languages, but the English classes have remained under the patronage of the city. The charge for tuition is $\$ 1$ per month, three lessons of two hours and a half each per week. In the winter of 1898-99 more than 150 students were enrolled, about half being women. The Chinese department began with some 60 pupils. At the close of the session of 1888-99 only 50 pupils remained in the English department, and a much smaller proportion in the Chinese section. The instruction in both lines seemed to be of a very superior character. There is quite a rivalry among the young Chinese employed in the stores here in learning English. Some have entered the Russian Chinese schools, and others are asking the few Americans here to teach them. The Institute for Eastern Languages, whose opening was reported last year, is doing a good work, although not overburdened with pupils. There are now about 50 students-Chinese, Japanese, Korean, Manchus, and Mongolians.

> SOCIETIES, LIBRARIES, AND MUSEUMS.

Most of the officials-military, naval, and civil-are men of education and professional training (many are not natives of Siberia), and the lines of the various literary, scientific, and philosophical societies of St. Petersburg are continued here. A vast amount of valuable data is available only to those who read Russian readily. Formerly, many books of science and research were accompanied with French or German translations, but this has been mainly abandoned.

In all the governments of western and eastern Siberia libraries, museums, and societies are found, patronized by most of the officials, while many important contributions have come from learned convicts. A branch of the Imperial Russian Geographical Society is located at Habarofsk, and a museum and library are connected with it. A subdivision of this branch-the Society for the Investigation of the Amur Province-is at Vladivostock. It has an excellent museum and a fairly good library, with, I regret to say, very few publications of the United States.

The best equipped library is the Amur branch of the Imperial Royal Geographical Society at Habaroisk, and next that of the Naval Club at Vladivostock, another institution which would gladly receive many of the valuable publications of the United States. Throughout the provinces there are small libraries in schools, regiment, and police departments. There is a quasi-public library at Nikolsk, in the south Ussuri district, and a small library in the city hall at Vladivostock, with a reading room attached. A circulating library occupies part of a printing office, and is well patronized. A publisher-Theodore Pavlenko-has lately given 100,000 rubles ( $\$ 51,500$ ) to open 2,000 public libraries.

There is a medical association composed of the doctors of the naval and military branches of the imperial service in the Amur and Maritime provinces. It has a northern and southern branch, and will hold a session at Habarofsk next September. The southern branch opened at Pasteur Institute at Vladivostock last year.

NEWSPAPERS.
There are four newspapers published at Habarofsk, one the offcial organ of the Government and three published at intervals.

At Vladivostock there are four-Dalny Vostok (the Far East), Vostochny Vestnik (the Eastern Herald), Vladivostock, and Listok Oblgavany (the Advertiser)—published from two to four times per week, containing telegrams via St. Petersburg and Hongkong. There is supposed to be a censorship of the press in Siberia, as in European Russia, but its effects are scarcely noticeable to the foreigner. The same holds true of the mail matter received.

## NOTES.

Last year a Japanese-Rassian school was opened at Blagovestchensk, where a Japanese colony has been established, as also in Manchuria. Reports say the Japanese scholars are very diligent, make great progress, and learn easily to read and write Russian. The bishop of this diocese is my authority that the same holds good of the mass of Koreans now scattered in this region as laborers. Their children are bright scholars, and both parents and children readily become followers of the Russian church.

In the programme of reforms are plans for agricultural schools throughout the Empire.

A summer school for teachers will be held at Nikolsk during July or August. The project for a large mechanical school at Nikolsk, in connection with the Great Siberian Railroad, is completed, and the building will be proceeded with. The cost is estimated at 100,000 rubles $(\$ 51,500)$.

A school for river navigation has just been opened at Irkutsk.
R. T. Greener, Commercial Agent.

Vladivostock, April 17, 1900.

## INSTITUTE FOR EASTERN LANGUAGES IN VLADIVOSTOCK.

Extensive improvements have been made to the grounds and the interior of the institute building. The half-finished structure, which was entered a year ago, is now nearly completed. At present there are accommodations for 500 to 800 students in lecture rooms, library, seminaries, and music rooms, for their choir is as much a part of the school curriculum as it is of the church services. There is little accommodation for resident students, as with us; only a few students are allowed quarters in the building, the spare apartments being reserved for the director, his family, and his immediate staff, the major part of whom consists of pupils whose talents he has observed and judiciously guided in postgraduate study at home and abroad.

The annual appropriation for the school is 90,000 rubles ( $\$ 46,350$ ). Professor Lugebil, born in Alaska, teaches English.

I may add here that Mr. C. J. Czechowicz, of Pennsylvania, has been appointed instructor of English in the town school evening classes.

Not more than forty-eight students are now enrolled in the institute proper. Twenty more, however, are expected-some from European Russia, others from Japan, China, and Korea.

A magazine, says the director, will soon be issued with Russian translations of English and French works on the Orient, its people, religions, and literature. The library embraces over 16,000 volumes and many rare idols, etc.
The plan of studies consists of lectures during the week from $9 \mathrm{a} . \mathrm{m}$. to $2 \mathrm{p} . \mathrm{m}$., as follows:
Course I: Lectures.
English language ..... 6
Chinese language ..... 11
Theology ..... 2
Oriental geography ..... 3
Political and administrative organizations (civil government), Russia and other countries ..... 2
Political economy ..... 2
Practical exercises daily, 4.30 to $6 \mathrm{p} . \mathrm{m}$.: Hours.
English ..... 6๐
Chinese ..... 6
Course II:Morning lectures-
English language ..... 4
Chinese language ..... 9
Japanese language ..... 10
Korean language ..... 9
Mongolian language ..... 6
Manchurian language ..... 6
International law ..... 2
Political and administrative organization of China ..... 2
History of oriental countries ..... 1
Total ..... 19
Evening exercises-
English language ..... 3
Chinese language ..... 6
Japanese language ..... 6
Korean language ..... 6
Mongolian language ..... 3
Manchurian language ..... 3
Total ..... 27

All the studies are obligatory, with the exception of the Japanese, Korean, Mongolian, and Manchurian languages. In addition to Chinese and English, each student must select one other language.

Riciard T. Greener, Conmercial Agent.
Vladivostock, November 5, 1900.

## COMMERCIAL EDUCATION IN SCOTLAND.

For some years educationists and business men in Scotland have been giving attention to the subject of commercial instruction in comection with the pubiic schools and higher educational institutions. In January of this year the Edimburgh Merchant Company and Chanıber of Commerce and the Leith Chamber of Commerce remitted to a joint subcommittee the consideration of how the present system of education should be altered so as to bring it in consonance with the needs of business men, with power to take such action as they might deem proper in support of the morement for rendering commercial instruction more efficient and extended. The committee has just issued a report. It is explained in the first few pages what steps were taken to procure information. Forty-three witnesses were examined, including prominent educators and representative men of affairs, and in the course of the investigation the committee collected printed matter relating to the subject, consisting of productions by the witnesses, prospectuses, etc., of schools, and official reports on commercial education in certain continental countries and in the United States.

The main conclusions arrived at by the committee are, briefly:
(1) That commercial subjects properly so called should not be taught in the public schools, but that the study of arithmetic, of history, and of geography should have a commercial application; the aim of the school course should be to give a sound general education fitting pupils for entering on a commercial career.
(2) The beter teaching of modern languages is also a first necessity for the improvement of commercial education.
(3) Faculties of commerce should be established in the universities.

Omitting the introductory pages, the report is as follows:

## I. -WHAT IS COMMERCLAL EDUCATION?

For the present purpose, it may be sufficient to say that the term is used to denote the whole course of educational training for a business career, whether it consists of general education or education of a specialized nature bearing on commerce. In the elementary stage, there need be no distinction in the training of a boy destined for business and of another who may look forward to a professional or literary calling. It is only after the foundation of general education or culture has been laid that questions arise as to teaching ordinary subjects so as to have a commercial application and introducing other branches which are necessary to the proper equipment of those intended for business. The nature and extent of such specialization will depend upon the description of business career aimed at and the length of time which the pupil can remain at school or give to the prosecution of study after leaving school.

## II. -EXISTING EDUCATIONAL PROVISION.

For the great majority of boys and girls who leave school at the age of about 14 to enter business houses as clerks, shop assistants, etc., the only school education available is that of the elementary school, which, in Scotland, is provided in every burgh or parish by the school board, and in certain places also by voluntary effort. In some of these schools there are now advanced departments, in which the curriculum must make provision for adequate instruction in the ordinary English subjects, and, as a rule, drawing and such other of the following subjects as the Scotch education department may determine, viz, languages, mathematics, and science. There has also recently been established a limited number of higher grade schools having a "commercial" as well as a "science" course. In the former, it is declared that the education is "predominantly commercial," and pupils must, as a rule, take, in addition to the ordinary English subjects and drawing, "one or more modern languages, bookkeeping, shorthand, and knowledge of commercial products." Although this higher education is now placed within the reach of all who obtain the merit certificate in the elementary school, it has been found that the proportion of pupils who remain to take advantage of it has as yet been small. There are, however, evening continuation schools, at which those having the desire may, to some extent, revise or supplement their elementary education. One of the objects of these schools is to give "opportunities of learning the scientific principles which underlie the employment upon which they (the scholars) have entered."
On the other hand, to those whose parents are in a higher social position, or who themselves have gained bursaries, entitling them to higher education, the secondary school is a vailable. In this type of school, there is not only the common elementary grounding, but also a superstructure of advanced education divided into classical and modern, the modern in some cases being subdivided into a commercial side and a science side. The commercial course usually extends-over three or four sessions, and includes modern languages, commercial geography, and commercial correspondence, mathematics, and commercial arithmetic, bookkeeping, and shorthand. At schools of this class, the age on leaving is, of course, higher than at the elementary schoolsfrom 16 to 18 -and pupils are drawn for apprenticeships which may lead to the higher positions in commerce.

As connected with this branch of the report, it may be proper here to refer to the means adopted by the Scotch education department to put a "hall mark" upon the education given at the primary and secondary schools, respectively. In the former there is the merit certificate, which will be granted to any scholar over 12 years of age who, subject to certain conditions, "shows thorough proficiency in the three elementary subjects of reading, writing, and arithmetic." This certificate is regarded by the department "as marking in a fairly definite way the dividing line between a primary and secondary education;" is necessary as a passport to the advanced departments of elementary schools, or to the higher grade schools; and is also valuable as an official attestation of the attainments of pupils who require to leave school on the completion of the elementary course.

To those pupils who continue their education, either at a primary or secondary school, suitable tests are applied by means of leaving certificates, which, since 1888, have been granted anmually by the department. These consist of different classeslower grade, higher grade, and honors. The lower grade is usually taken at the age of about 15, the higher grade and honors at the close of a full secondary course.

The subjects having a commercial bearing in the examination, apart from English, are French and German-in which commercial, in addition to literary, questions are set-and bookkeeping and commercial arithmetic. It is understood that a large number of university and professional authorities have agreed to accept the leaving certificates in lieu of their own preliminary examinations, and in this way, as well as from their importance otherwise, these certificates, especially those of the higher grade and honors, are regarded as of great value.

In centers of population, there are usually to be found the means of continuing education on more or less specialized lines, and of obtaining instruction in the somewhat mechanical arts of shorthand and typewriting. In this respect the youth of Edinburgh, Leith, and surrounding districts are exceptionally fortunate in having the Heriot-Watt College, where students may obtain, at very moderate fees, courses of instruction suited to their special business requirements.

University education, to a limited extent, is also available to the commercial student. He may attend, e. g., the class of commercial and political economy and mercantile law, founded in the University of Edinburgh by the governors of two of the merchant company endowments, or the classes of French and German established under recent ordinances.

## III. -DEFECTS OF THE PRESENT EDUCATIONAL ARRANGEMENTS.

There is a consensus of opinion among the business men who gave evidence that elementary education is so imperfect that many boys entering offices or warehouses write in a slovenly way; that their arithmetic is deficient; and that they are unable to compose a letter properly, and in some cases even to spell correctly; and these witnesses attribute this to the want of a thorough grounding in elementary education. The educational witnesses explain this failure by the fact that too many branches are taught in the elementary course, and state as their opinion that it would be more profitable to the great majority of pupils of all classes if the teaching of any language other than English were postponed until a later age than at present, so that attention might be concentrated on what is termed an English education. It may be assumed that the evil complained of is not likely to be so pronounced in future, as the new code and the merit certificate have been arranged to secure greater attention to the essential subjects of an elementary education. A further explanation is offered by educationists so far as handwriting is concerned, viz, that a careless habit is induced by the speed at which the pupils find it necessary to write in their numerous examinations.
While no general complaint has been made to the committee on the subject of secondary education, it has not escaped criticism in detail. Viewed from the standpoint of business men, it is considered that too much time and attention are still given to Latin and Greek and too little to French and German; that the modern languages are not so thoroughly taught or mastered as to be used with facility in business; that the teaching of history, geography, and arithmetic is too little adapted to the needs of a business career; that bookkeeping taught at school is of little or no value, and that there is not enough provision for the teaching of science. There is also the want of encouragement in the shape of bursaries set apart to pupils in the modern side of the secondary schools. On the other hand the educational witnesses state that their chief difficulty with boys intended for business is to get them to remain a sufficiently long period at school to take the advantage of a full course of instruction. They consider also that the classical side has its attractions for clever boys, even those who may be looking forward to a commercial career, and that the modern side is too much looked upon as the resort of the backward or less promising pupils.
The committee have been much impressed by the great stress laid upon the inefficient teaching of modern languages through the want of properly trained and qualfied teachers. Under present arrangements the work is to a large extent intrusted to foreigners, who, as a rule, are not educated in the same way as the teachers of Latin and Greek and do not sufficiently realize or sympathize with the difficulties encountered by boys in learning foreign languages. The lack of sympathy between teacher and pupil naturally interferes seriously with influence and discipline.
Regarding the training of teachers generally, it appears that there is no provision at present in the normal schools for training teachers in commercial subjects, but that science is receiving special attention.

It has been suggested to the committee that, so far as commercial education is concerned, some of the text-books are not sufficiently practical, and that questions set by examiners are occasionally open to the same criticism. It is scarcely necessary to add that these are matters of great importance bearing directly on the state of commercial education.

In the second branch of this report the importance of the leaving-certificate examinations conducted by the Scotch education department has been alluded to. It may now be useful to give from Sir Henry Craik's report for this year, issued in August last, the following extracto showing the result of the test in the subjects of examination bearing on commercial education:

French, lower grade.-"The answers to the literary questions were creditable; those to the questions on commercial French were worthless."

French, higher"grade.-"The philological answers were poor, in large measure owing to imperfect text-books, and those on commercial French were unsuccessful."

German, in both grades.-"The commercial questions were uniformly answered in a very satisfactory way."

Bookkeeping.-"The second part of the paper was not, however, so well done. * * * The third part of the paper was also disappointing."

Commercial arithmetic.-"As in former years, many candidates were presented who were quite unprepared for an examination of this character; in other cases the work was hurried and incorrect."
Certain defects have been pointed out to the committee in connection with university education for business men. There is the disadvantage at which students of modern languages are placed as compared with students of Latin and Greek in the preliminary and the general bursary examinations at the universities. In these examinations, while the full marks for Latin and Greek are 100, those for French and German are only 50. The classes in French and German do not have the same academic standing as those for Latin and Greek, inasmuch as the former are merely lectureships-the lecturers not being members of the senatus-while the latter have all the privileges of full-equipped chairs. Lastly, there is no provision for obtaining a complete course of university education suited to the business man or a degree in commerce.

It may be remarked, further, that there is no general provision, as in the case of students training for the professions, for guiding and stimulating the education of young men aiming at following a business career. On leaving school they are left to the freedom of their own will in the matier of education, and may either refrain altogether from prosecuting their studies, or, if a sense of duty and a laudable ambition prompt them otherwise, may choose such courses of instruction and follow them with such measure of diligence as they think proper. Attempts have been made to supply this want by the institution of the examinations of the bankers' institute and to a limited extent, in Scotland, of such examinations as those which have for several years been conducted by chambers of commerce and other public bodies.

At this stage it may be proper to refer to the opinion held by some business men that the facilities which exist for mental improvement are not taken advantage of by youths during their apprenticeship to the extent they might be. It would seem that with many, once they are free from the restraint of school discipline, there is a disinclination to study and a want of the moral earnestness and the perseverance which have been understood to be characteristic of the Scottish race. Possibly the inordinate love of pleasure and the present-day rage for sport account largely for this unfortunate tendency. At least they form a serious obstacle in the way of the improvement of the commercial education of the country.

> IV.-NECESSITY FOR MPROVEMENT.

The need for improvement in commercial education is due mainly to three causes: (1) The extraordinary development of business by the introduction of railways, and the expansion of international commerce throughout the whole civilized world by the introduction of steamships and telegraphs, all of which has taken place within the last two generations; (2) the changing conditions and methods of conducting business, arising, to a large extent, out of this development and expansion-large corporations and limited liability companies steadily supplanting private firms in conducting existing businesses and in starting new businesses and trading concerns of all kinds; and (3) the commercial rivalry of continental nations and America, who have more thoroughly realized the necessity of, and made very complete provisions for, commercial education.

Taken cumulatively, these reasons demand, in the opinion of the committee, the early and earnest attention of all concerned to the task of improving commercial education. In the past not a little credit for the commercial position among the nations to which Scotland has attained is due to the education which was available; but if that position is to be maintained, it is imperative that advance must be made in education commensurate with the requirements of the present time. The committee believe that a sound and sensible education, both primary and secondary, is
the first requisite for the business man. Provision must also be made for producing men of high education and wide culture fitted to fill responsible nositions in the large undertakings of the country and to take their place in the important and responsible work of public administration, which so largely devolves on members of the mercantile classes.

> v.-CONCLUSIONG.

The committee beg leave to state the following as the conclusions at which they have arrived:
(1) That primary education only should be given to pupils under 12 years of age, and that secondary or higher subjects should not be commenced until the pupil has gained a merit certificate or passed an equivalent examination. If this method were followed, the committee believe that not only would the pupil be better grounded in a sound English education, but he would also be more likely to get the full benefít to be derived from a secondary course.
(2) That it is necessary to provide a more modern secondary education that would better appeal to a large proportion of the pupils. It is acknowledged that the study of Latin and Greek is an admirable mental training, and that some acquaintance with Latin is very helpful to the student of English. Much of the study of Tatin and Greek, however, has the disadvantage of being altogether divorced from everyday life, and it is only natural that boys should take more interest in the languages and affairs of the world in which they live. The committee have no intention of decrying classical education while asserting that the study of English literature-of English and Scottish history, of the geography of the world and especially of the Englishspeaking world, of the elements and principles of science and mathematics-is real education likely to stimulate a boy's highest faculties.
(3) That commercial subjects properly so called should hot be taught at school; but that, as provided for in the Scotch code with reference to higher grade commercial schools, "the study of arithmetic, of history, and of geography should have a commercial application." The committee consider that the aim of the school course should be to give a sound general education, fitting pupils for entering on a commercial career.
(t) That the better teaching of modern languages is also a first necessity for the improvement of commercial education. To enable this to be done, there is required, to begin with, an admission on the part of educational authorities that a man may be an educated and even a cultured gentleman although he has not seriously studied Latin or Greek; and, further, that both France and Germany possess invaluable literatures, with the advantage that they are in languages which are living and not dead. Three steps seem necessary to stimulate the study of modern languages.
(a) That the universities should show proper respect for modern languages by giving the teachers of French and German the same status as the professors of Latin and Greek and by approximating the value for these subjects in examinations.
(b) That students should be induced by bursaries and other means to master modern languages, so that there may be trained for the teaching of French and German Englishmen and Scotsmen of equal ability and culture to the men who now teach Latin and Greek. The committee are much impressed by the consensus of opinion among the educational authorities who gave evidence that modern languages can never be properly taught in this country until taught by Englishmen and Scotsmen who have had university training and have resided abroad.
(c) That secondary schools should also dignify the teaching of modern languages by placing them on a level with the dead languages in bursary competitions and in all other respects, and by offering proper remuneration to the teachers of modern languages.
(5) That boys should not leave school to enter on a business career until they attain the age of 16, those who can afford to do so being encouraged to remain till 17 or 18; and that employers should, as far as possible, require the production of and give due recognition to the leaving certificates by the Scotch education department as evidence of educational attainments. The committee would suggest that the department be approached with the view of instituting, in connection with school education, group certificates of different grades that would come to be universally known and recognized by business men in their selection of apprentices.
(6) That it is most necessary young men should continue their education, after they have begun business, during their leisure hours. In this way the defects of ordinary education may be remedied, and it is during the years of apprenticeship that young men may most profitably study commercial subjects. The committee agree with the witnesses that it is not natural for boys at school to take any interest in such subjects as bills of lading or foreign exchange, but that young men in offices
and factories may with advantage study the theories and laws regulating matters with which they are in constant touch in their daily work. Of course, if a young man is to derive benefit from the evening classes at the Heriot-Watt College or any similar institution, he must have set his heart on his work.
(7) That in view of the increased attention being given to strengthening and rendering more efficient the modern side in secondary schools, and of the tertiary schools which exist in large towns, such as the Heriot-Watt College in Edinburgh, the committee are not prepared to recommend the institution of a purely commercial school on the lines of the continental commercial schools at Antwerp, Leipzig, and other places, or of the London School of Economics and Political Science.
(8) The committee, while recognizing the good work being done by certain chambers of commerce and other mercantile bodies in Scotland, by means of examinations for commercial certificates, are of opinion that such work would be more efficiently accomplished on a uniform system by a national examining board. It is accordingly suggested that the proposal be brought before the Scotch education department.
(9) That to enable commercial education to take its proper place in the educational arrangements of the country and fully to meet the requirements of commerce, it is desirable that faculties of commerce should be established in our universities. It is the opinion of the committee that such faculties would have a very beneficial effect in raising the status and importance of the commercial side in the secondary schools by giving it, like the classical or science side, an opening to the university, by molding and regulating the course of study, and by inducing pupils of ability, who at present prefer another course, because it leads to the university, to study for a commercial career. Turning to the interests of commerce, the committee believe that a university education would be of the greatest service to the men who are to occupy the chief positions in large commercial undertakings. To discharge aright the important and delicate duties and responsibilities which devolve upon them, the development of mind and width of culture which are produced by university study are as essential as in the case of the professional man, and there is no reason why the possession of a university degree should not be placed within the reach of the one as well as the other.
The classes of modern languages, of political economy, and possibly one or more of the present history and law classes would form the nucleus of a faculty of commerce, and to these might gradually be added classes having more direct reference to the history and practice of commerce. The education to be provided by such a faculty would primarily be taken advantage of by young men having the means and leisure to attend as regular students; but others engaged in business might, as is the practice with lawyers' and accountants' apprentices, also take the classes if suitable hours were fixed. It would also be available for the training of those who might act as teachers of commercial subjects in schools.

Although the committee hold the opinions in regard to university education above expressed, they feel that the evidence given by the business men who came before them shows that the need for that education is not appreciated by the mercantile community, and they respectfully urge chambers of commerce and other mercantile bodies to consider this important subject and mature the opinion of business men in regard to it.

The committee have not thought it necessary to make any recommendation in regard to the education of girls as distinguished from that of boys. They hold that for the purpose of commercial education differentiation is not required, and that if their views above expressed were adopted, the increasing number of girls who look forward to clerkships, as well as the few who aspire to higher positions of trust in mercantile life, would, equally with boys, have the means of obtaining suitaile education.

Rufus Fleming, Consul.
Edinburgh, October 12, 1900.

## CHEMICAL FOODS IN GERMANY.

In opposition to the determined vegetarians who condemn all animal food, there is a growing number of physiologists who insist that abstention from meat, if continued for ages and generations, is responsible for the feebleness and low intellect of certain races. Chemists are becoming more and more anxious to find new sources of nitrogenous foorls, and the artificial-food industry has developed widely in Germany, chiefly in the large works which supply dyestuffs, for which albumen is an important material.

The artificial foods are mostly mixtures of more or less secret composition. Thus, the tropon of Professor Finkler, of Bonn, whose works are at Mühlheim, consists of one-third of animal and two-thirds of vegetable albumen. Albumenose is à frequent constituent of those foods. By albumenose is understood a preparation which, as regards solubility, occupies a position intermediate between the original animal albumen and its peptone.
The managers of the Elberfeld color works have made a hit with their somatose, which is such an albumenose, and have quite recently brought out the more economical tannin and milk somatose, which may become a very important food for the masses. This latter preparation utilizes the casein of the milk.
The nutrose of the dye works at Höchst; the eukasin of Salkowsky; the sanatogen of Bauer \& Co., of Berlin, contain all the casein compounds with sodium or ammonium.

Oliver J. D. Hughes, Consul.
Coburg, May 17, 1900.

## MANUAL TRAINING IN GERMANY.

There exist at present in Germany, distributed in 605 places, 861 schools and institutes wherein manual training is carried on in 1,514 workshops. Of this number, 836 schools and institutes conduct the training on a pedagogical basis. Prussia has 570 manual-training schools. The 1,514 pupils' workshops comprise 286 independent manual-training schools and 238 public schools, of which 16 are auxiliary schools where the work is obligatory, 17 are middle-class schools, 41 are high schools (made up of 8 gymnasiums, 6 technical gymnasiums, 12 lower and advanced technical high schools, and 15 boarding schools), 7 are preparatory institutes, 28 are teachers' seminaries, and 93 are boys' asylums; while the remainder consists of various kinds of private educational establishments.
Five hundred and thirty-five workshops are devoted to wood carving, 527 to working in cardboard, and 356 to the carpenter's bench. Of these, 68 are closely connected with wood carving, 77 with preparatory roughing-out work, 35 with metal work, 28 with country timbering, 11 with wood and metal turning, and 11 with modeling in clay.

Over 2,200 German teachers have been taught to become instructors in manual training. Of these, 954 were taught in Leipzig and 1,250 acquired training in 33 places in other parts of Germany.

Richard Guenther, Consul-Generul.
Frankfort, June 19, 1900.

## METHOD OF RECKONING TIME IN SPAIN.

The Queen Regent has signed a decree establishing the method of accounting time in this Kingdom, viz:
(1) In all railway, mail (including telegraph), telephone, and steamship service in the Peninsula and the Ballearic Islands, and in all the ministerial offices, the courts, and all public works, time shall be regulated by the time of the Greenwich Observatory, commonly known as western European time.
(2) The computation of the hours in the above-mentioned services will be made from the hour of midnight to the following midnight in hours from 1 to 24 , omitting. the words tarde (afternoon) and noche (night), heretofore in customary use.
(3) The hour of midnight will be designated as 24.
(4) The interval, for instance, between midnight (24) and 1 o'clock will be designated as $0.05,0.10,0.59$.
These regulations are to take effect the 1st of January, 1901.
Government officials are directed to observe and carry out the decree in each and all of their respective departments and bureaus.

Dwight T. Reed, Tice-Consul.
Madrid, August 4, 1900.

## A German view of United states development.

The German central bureau for the preparation of commercial.treaties has just published a book written by its president, Dr. Vosberg-Rekow, who, as a German delegate, attended our last year's Philadelphia industrial exposition and spent months in investigating the industrial conditions in the United States. This book is remarkable for the candor and ability with which Dr. Rekow handles his important theme "The commercial treaties of 1903," in the treatment of which he reviews the economic conditions of the great industrial powers and their relations toward each other as competitors. With reference to education he says:

Germany's industrial advancement is principally due to the thoroughness of her technical education. It is strengthened by the continuous substituting of machinery and machine tools for hand labor. Still, in this respect the English industry in some branches is ahead of us. It is worthy of note that in this evolution, too, the United States has the foremost place and has made gigantic strides, not only in applying machine tools, but in inventing and manufacturing them; so that to-day she supplies us. This signalizes in an extraordinary degree American intelligence. Thus, the Americans, though wanting our superior technical education, thanks to their practical eye, improve upon our methods and apparatus. Theirs is rather the activity of an experimentalist than that of a trained craftsman, but a clever faiseur, if he but have assurance and luck, may distance the educated master. The Americans have no thorough education; nor do they possess a modern industrial system as we Europeans understand the terms. The American applies himself to a single branch or to a specialty, with utter disregard of Euronean methods and their results. He devotes to his work an amount of energy which stupifies Europeans, and, for a while, he succeeds in driving us out of the line of articles on which he has centered his energy. Against such peculiar activity a general trade policy is quite ineffectual; we must put ourselves in condition to counteract this artificially forced growth of specialized industry.

Smon W. Hanauer, Tice-Consul-General.

Frankfort, October 13, 1900.

## MEDICAL DEGREES IN GERMANY.

Consul Hughes sends from Coburg, November 5, 1900, translation of the rules for conferring the degree of doctor of medicine which took effect October 1, as follows:

The degree of doctor of medicine can be conferred only after a thesis has been published and a verbal examination undergone. A "promotio in absentia" will not be allowed under any circumstances. By his thesis, the candidate must prove that he is able to work independently on scientific lines. The thesis must usually be written in German, though the use of another language may be allowed by the faculty. A biography of the candidate must be appended. The verbal examination consists either of a simple questioning or of an "Examen rigorosum." German subjects can not receive the degree before having obtained permission from the Government to practice as a physician within the Empire.

By a unanimous vote of the faculty and with the permission of the supervising board, deviations from this rule may be granted in particular cases, in which the candidate can not, for weighty reasons, be expected to comply with them. Foreigners who have received the Government permission to practice medicine within the German Empire are subject to the same regulations regarding their promotion to the degree of doctor of medicine as those laid down for German subjects. Foreigners who do not possess the permit for the German Empire and who wish to be promoted should lay before the faculty proofs of the following facts:
(1) That they have had the schooling required in their own country for passing the examination and receiving the degree; if in their own country fixed rules with regard to this matter do not exist, they will have to show certificates from home in which proof is given that their schooling is equal to that required for obtaining the matriculation certificate at a German "Realgymnasium."
(2) That they have passed through-
(a) Studies before a regularly organized medical faculty for as many semesters as are required in Germany for admittance to the regular medical examinations.
(b) That at least one of those semesters has been spent at the German university at which they wish to receive their degree.

This latter rule may be suspended if the candidate be well known to the faculty. The printed thesis, which must be produced before obtaining permission to appear for the degree examination, may, at the faculty's discretion, be replaced by a scientific work of the candidate which has already been printed and published.

## COMMERCIAL EDUCATION IN SAXONY.

Nowhere in the world does commercial and technical education hold such a prominent place as in Germany, and of all the States which compose this Empire, Saxony takes the lead in this direction. This little Kingdom alone has about fifty commercial schools. These schools are in the first instance organized by the merchant unions, which exist in every little town in the country. The State exercises a supervising influence over each school. An inspector appointed by the Government visits the schools periodically. The merchant union supports the school; but if there is any deficit at the end of the year, this is made good by the State. The buildings, together with light and heat, are furnished by the town authorities. In many cities of Saxony, handsome buildings have been erected for the purpose of commercial schools alone.

The average salary of the principal and teachers depends upon their age and upon the size of the town. A principal in a large city will get from $\$ 1,000$ to $\$ 1,500$. In the smaller cities, however, the salaries range from $\$ 600$ to $\$ 800$ per annum. All these teachers have been prepared for their work by completing either what we term a classical education or some thorough course without the classics, where more attention is paid to modern languages and business methods. It is the general belief that the latter course secures greater practical results in the schools.

Although the State regards these commercial schools with a certain benevolence, it has thus far made no solid provision for the teachers. In every common village school throughout the German Empire the teachers know just what they have to expect. There is a staple system of promotion, together with a pension after so many years of service. This is not the case with teachers in the commercial schools, and this fact does much to deter the healthy development of the schools, inasmuch as it prevents many able teachers from entering them. However, teachers in the commercial schools of Saxony are pensioned after twenty-five years of service, while in Prussia no pensions are granted.

The students who attend these schools come from families of the middle class. They are apprenticed to merchants during their whole attendance at school. Their ages vary from fifteen to eighteen. The law governing the relations between master and apprentice is very strict, and while the pupils are in attendance at school the director takes the place of the master. A number of commercial schools in Saxony takes only students who devote their whole time to attendance; but the majority have apprentices who spend half the time in some business house. The latter plan has been found to be conducive to better results, owing to the opportunity of combining theory with practice.

There is some complaint made on account of the disposition of many merchants to enploy clerks who have not completed the full course of two years. There is no doubt that the merchants could greatly assist these schools if they insisted on hiring only young men who had certificates or diplomas from commercial schools.

For a small city, the commercial school of Eibenstock is a model of its kind. It occupies spacious rooms in a large industrial school building and has a director and several teachers. As it is typical of all the other commercial schools in Saxony, I give the scheduled course in detail:

FORENOON.

Monday.-Calculation, bookkeeping, French, English.<br>Tuesday.-English, typewriting, French, calculation, commercial correspondence.<br>Wednesday.-Stenography, calculation, bookkeeping, commercial correspondence.<br>Thursday.-English, French, calculation.<br>Friday.-Geography, correspondence, French, English.<br>Saturlay.-English, calculation, French.

AFTERNOON
Monday.-German, French.
Tuesday.-Geography, calculation.
Thursday.—Writing, French.
Friday-German, commercial correspondence.
This plan speaks for itself. Noticeable, however, is the time devoted to English and French. Through the courtesy of the principal and board of trustees, I was permitted to attend the exercises for several days. It is astonishing with what rapidity and precision the young students dash off sentences in English and French. During the second year, the hours devoted to these languages are taken up entirely with conversation and readings, and not a word of German is heard. During the hours devoted to calculation, the currency, together with the measures and weights of every country in the world is taught, and the students are compelled to make rapid mental calculations in them all. Outside of school hours the apprentice is kept busy looking after the English and French correspondence of his chief and in learning that particular trade or business of the house to which he is apprenticed. After business hours and in the evenings he must prepare for the next day's school.

During the winter the principal of the Eibenstock commercial school delivers to his students a series of six lectures, to which the public is invited. These lectures deal entirely with questions relating to trade and the development of commerce. At each one of these meetings a student must prepare and deliver a short talk on some given topic.

In 1898 a commercial university was established in Leipzig. Only those are eligible to entrance who have completed the secondary school course or have passed the examination which admits to the one-year conscription service in the army. There is an attempt at present to make the diploma or certificate of the commercial school equivalent to the certificate of the one-year army service, but as yet nothing has come of it. Should this be carried through in time, the students of all the commercial schools would be eligible to the university. ${ }^{1}$

Inasmuch as the Commercial University in Leipzig has excited a great deal of attention, and students from all parts of the world have gathered to hear the lectures, I give for the benefit of American students and others interested, the course of lectures given during the summer semester of 1900: Political economy; history of political economy, including socialism, money, banks, and the bourse; commercial law, introduction to the study of statistics, German colonial politics, insurance, development of German commerce, chemical technology, development of the foreign commerce of all nations, science of finance, international law, elementary lessons in Chinese grammar, lectures on China and Japan, lectures on the languages and customs of the people of Indo China, history of the papacy during the Middle Ages, introduction to philosophy and logic, history of German literature, history of England as a world power from 1500 to 1900; physical geography, natural philosophy, and physics; history of the development of education in Germany; state and church in the nineteenth century; comparative history of the colonies of the different European States; constitutional history; pedagogy; natural history, hygiene, etc.; lectures on travel.
${ }^{1}$ This is an error. The certificate of one year's military service entitles to nothing else. To enter the university, three or fcur more years in the secondary school are required.-L. R. K.

In addition to these lectures there are exercises in bookkeeping, correspondence, and office work, with commercial arithmetic. There are also Handelsseminarien, where professor and students meet once a week for the purpose of discussing questions relating to trade and commerce. Instruction with commercial correspondence is given in the following languages: English, French, Italian, Russian, and Spanish. In addition, arrangements are made for instruction in the German language and correspondence for foreigners.

Thus it will be seen that the student has a very broad field from which to choose those subjects which interest him most. It must be remembered that the Commercial University is connected with the university proper, and that a great many of the above-named lectures have long been established courses in the regular curriculum.

It is natural to suppose that the majority of future directors and teachers in the commercial schools will be chosen from the ranks of those who have completed a course in the Commercial University. But the practicability of this scheme is yet to be demonstrated, as most of the eligible students have had very little, if any, actual experience.

Eibenstock, Nócember 16, 1900.
Ervest L. Harris, Consular Agent.

## THE GROWTH OF GERMAN CITIES. ${ }^{1}$

Under the system which prevails in Germany, a census of the population is taken on the 1st of December every five years, namely, each decennial year and the intermediate fifth year. The census which was taken on the 1 st of the present month shows the following changes since December 1, 1895, in the population of the 32 principal cities, which have each more than 100,000 inhabitants:

| City. |  | 1900. | Increase since 1895. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Inluabitants. | Pcr cent. |
| Berlin |  |  | 1, 884, 315 | 207, 041 | 12.3 |
| Hamburg |  | 704, 669 | 79, 117 | 12.7 |
| Munich.. |  | 498, 503 | 87, 502 | 22.4 |
| Leipzig.. |  | 455, 120 | 55, 126 | 13.8 |
| Breslau. |  | 422, 415 | 49, 246 | 13.2 |
| Dresden |  | 395, 319 | 58, 909 | 17.5 |
| Cologne |  | 370, 685 | 49, 121 | 15.2 |
| Frankfort |  | 287, 813 | 58, 534 | 25.5 |
| Nuremberg |  | 260,743 | 98,357 | 60.6 |
| Hanover . |  | 234, 286 | 24,451 | 12.1 |
| Magdeburg |  | 229, 732 | 15, 308 | 7.1 |
| Dusseldorf |  | 212,949 | 36, 964 |  |
| Stettin... |  | 209,988 | 69, 264 | 49.2 |
| Chemnitz. |  | 203,584 | 45,567 | 28.3 |
| Charlottenbu |  | 189, 300 | 56, 923 |  |
| Konigsberg. |  | 187,186 | 14,390 | 8.3 |
| Stuttgart |  | 176,318 |  | 11.4 |
| Altona. . |  | 160,885 | 11,941 |  |
| Bremen |  | 160, 823 | 18,929 | 13.3 |
| Halle ... |  | 156, 631 | 40, 327 | 34.7 |
| Elberfeld. |  | 156, 503 | 17, 166 | 12.3 |
| Strasburg. |  | 150, 268 | 14,660 | 17.5 |
| Dortmund. |  | 142, 418 | 31, 180 | 28 |
| Barmen ... |  | 141,435 | 14, 443 | 11.4 |
| Mannheim |  | 140,384 | 42, 604 | 43, 6 |
| Danzig |  | 138, 108 | 12,503 | 10 |
| Aix la Chape |  | 135, 287 | 24,736 | 22.2 |
| Brunswick. |  | 126,052 | 10,914 | 9.5 |
| Posen. |  | 116, 151 | 42,912 | 58.6 |
| Kiel |  | 107,071 | 21, 405 | 25 |
| Crefeld |  | 106,887 | a 358 | ${ }^{\text {c }} 0.3$ |
| Cassel |  | 105, 055 | 23,703 | 29.1 |

## a Decrease.

[^36] growth of cities and their efforts in public education.

To these may be added Essen, the exact statistics of which have not yet been published, but which is known to have passed the 100,000 limit, its present population being reckoned at 110,000 . Berlin naturally leads all German cities in the increased number of its people, but its percentage of increase falls far below those of Nuremberg, Frankfort, Halle, Mannheim, and Posen, all of which owe their rapid growth mainly to the development of manufacturing industries within their respective limits.

The significant decrease in the population of Crefeld is aitributable to the fact that it is a city of textile industries-silks, velvets, woolen, and cotton goods-which were formerly largely exported to the United States, but which of late years have suffered from the competition of similar goods that are now produced at home for the supply of the American market.

One hundred years ago Berlin had 169,000 inhabitants, Mamburg 100,000, Munich 33,000 , Leipzig 32,000 , Breslau 40,000, and Dresden 54,000 . The first census taken under the Empire, December 1, 1871, found Berlin with 825,389 inhabitants, so that its increase during the past thirty years has been $1,058,956$, or considerably more than 100 per cent, and this does not include the population of Charlottenburg, Rixdorf, Friedenau, Wilmersdorf, Steglitz, Panckow, Schœeneberg, and Halensee, all of which suburban cities are inhabited principally by people who do business exclusively in Berlin. Including these suburbs, Berlin would have a population of more than $2,500,000$ souls.

Hamburg had, in 1871, 240,251 inhalitants, Breslau 208,251, Dresden 177,089, Munich 169,478, Cologne 129,233, Frankfort 90,922, Nuremberg 82,929, Mannheim 39,614, and Kiel 31,747. Charlottenberg, a suburb of Berlin, which properly belongs to the capital, had, in 1871, 15,518, so that it has increased in population more than tenfold during the past thirty years.

Frank M. Masox, Consul-General.
Berlin, December 19, 1900.

## SOHOOL WORK IN GERMANY-SOME GENERAL OBSERVATIONS. ${ }^{1}$

By H. W. Harris, United States consul, Mannheim, Germany.

In a recent editorial in the London Daily Mail reference is made to the remarkable progress of the German Empire in various lines during the past few years. The writer says, in accounting for this progress, that Germany cultivates the creed of efficiency; that she puts the right man in the right place, without regard to station. While the manifest purpose of the article is rather to prod England than to extol Germany, there is much truth in what is said of this busy Empire. The German is efficient. He seeks results. He may work with inferior tools and appliances, and may in some respects be behind in his methods, but he is thorough in what he does.

In German school work efficiency is the watchword. One hears more in this country than in the United States of education as a means to earn a livelihood, or as an essential to a professional career, and less of it as a mere ornament or as an aid to citizenship or a source of personal influence. The German believes thoroughly in compulsory education. Illiteracy is intolerable in his view; but whether the boy or ginl shall go beyond the course required by the state depends upon what he or she is to do. I recently said to a teacher of large experience, "You have a boy 15 years of age. If he were to go to twenty-five of the leading business men of this city and ask them whether he had better complete the more advanced work of the city school-; what would these men say?" He replied, "Oh, that would depend upon what the boy is to do. Of course if he is to go into business or to learn a trade, they would not advise him to go through school." When I told him that our business men
would as a rule advise the completion of the high-school course, whaterer the business calling of the boy was to be, and cited the case of a young graduate of my acquaintance who had gone from school into his father's barber shop, he seemed much surprised and said, "What good would his education do him in a barber shop?" The value of education as an aid to good citizenship and as a source of influence had not impressed itself on his mind as it would upon that of an American teacher.
School work with the German child is a serious business to which, while school is in session, he seems to devote his entire attention. It is next to impossible to obtain permission to visit a city school because of the unwillingness of those in charge to have the children in any way disturbed in their work. The demeanor of the pupils as they hurry to school these winter mornings while lanterns are yet moving on the streets has often recalled to my mind the wise words of Mr. Findley,.once addressed with much emphasis to a body of teachers. Referring to the ever-recurring fad of making education a mere pleasant recreation, he said, "Fellow-teachers, school work isn't play, and you can't make it play."

Note a hundred German soldiers with their uniforms and their knapsacks, and a hundred German school boys with their colored caps and their school knapsacks, and you see that the two companies have much in common. The school boy feels that he is already under marching orders; that the state is watching each day's attendance at school and the work that he does. He eats plain food, is rarely out at evening entertainments, and less rarely hears the sentiment that all school work for a child is cruel or unhealthful.

As is well known, Germany excels any other nation in the number and variety of its technical schools. In these schools all branches of technical education are taught with special reference to actual utility in business. In a large manufacturing plant near this city are employed at all times as many as 150 expert chemists. These men are nearly all doctors of philosophy from German universities, men trained by the schools for the positions which they hold. This is but a single illustration of what one sees on every hand. This technical education has been an important factor in the marvelons industrial growth of the Empire within the past decade. The concern to which I have just referred sends to the United States more than $\$ 20,000$ worth of its product every week, and goes into every other great market of the world. In the Exposition of 1889 France easily carried off the laurels for the excellence of her electrical exhibits. In the Exposition of 1900 Germany was far in the lead of France. Her thorough technical training was everywhere in evidence. The plan to found a great technical school at Pittsburg, just now taking shape, points to an educational awakening among our own people that is full of promise. Nuch has been done by the schools we have; but better equipment and a wider scope of training is yet to be desired.

The German is a specialist. He as early as possible chooses his career and devotes himself to it. Ask him as to processes of manufacture other than in his own line and he knows less than the average American of the same station. His ignorance of his neighbor's business surprises you. Ask him as to the processes of his own line of manufacturing and he can tell you every detail. He is trained in the mastery of details, and where that mastery counts for success the German succeeds.
The German is a linguist. He acquires language easily and is taught French, and generally English, early in his school course. It is not uncommon to meet young Germans who speak three languages quite fluently. Ask them where they acquired their English and they will tell you in the German schools. Just now there is a growing interest here in the study of modern languages, and especially in the study of Enghsh. It is safe to say that an industrial motive is mainly back of the movement that is relegating Greek and Latin to the rear. A marvelously widening commerce admonishes the German authorities that the schools must teach the languages of that commerce. There can be no question as to the view that is taken here. The
work of our own schools as touching the needs of that commerce will do well to guard the same point. It is a mere idle dream to suppose that in the near future Germany or France will lay aside their speech and adopt, even for business purposes, the English language. Rather will it continue to be as it is now, that those who would take an efficient part in the commercial and industrial intercourse between the great English, German, and French speaking peoples must know at least two of these languages. Germany realizes this and is adapting herself to conditions as they exist. In all of the large manufacturing concerns in this locality are to be found young men or young women who can read, write, and speak both German and English, and who can prepare business forms and advertising matter in both languages. Our own manufacturers are coming to see the importance of a similar equipment. Each year is emphasizing the necessity. The acquisition of our Spanish possessions adds a yet newer factor in our school work, as it shall touch the needs of commerce. The demand for those thoroughly trained in modern languages and with an aptitude for business is already here. Our schools must aid in satisfying this demand. Whether this is a work for the public school, as it is regarded in Germany, for the intermediate college, or for the technical school, or for a school created for the purpose, is a question not easy of answer. One or the other or all must set about its solution, or to our own shores, as already to England, will go the trained German ready to take the positions which the needs of a world-wide commerce have created and which the American manufacturer and exporter must find someone competent to fill.

## CHILDREN'S GRONTH AT SCHOOL.

Some remarkable facts in regard to the infuence of school life on the physical development of children have been gathered by Dr. Schmidt-Mounard, of Leipzig, who has spent several years in making the observations which have enabied him to arrive at certain definite conclusions. In the first place he maintains that exact information as to the manner in which attendance at school affects the growth and weight of children is hardly attainable, but on the other hand he says positively that during the first year at school the growth of children, both as regards height and weight, is less than it was during any preceding year. Thus he says that during this first year at school the average child gains only $2 \frac{1}{2}$ pounds in weight, instead of 4 pounds as heretofore, and only increases 5 centimeters in height instead of 7 .
Further, he claims that children who do not go to school until they are 7 years old become stronger, and are in all other respects better developed than those who go to school a year sooner.
According to Dr. Schmidt-Mounard, the physical well-being of children, and incidentally their growth, is in many instances injured by ill health which is very often caused by their long confinement in unhealthy schoolrooms. Imperfect sanitary conditions and inadequate supply of fresh air and light are in his opinion the main causes of such ill health. Chronic ailments, on the other hand, such as headaches, sleeplessness, and nervous troubles, are to be found far more frequently among pupils of the higher than those of the elementary schools. They affict severely during the period of youth, and frequently as high as 50 per cent of the girl pupils suffer in some such way, while the number of boys who are similarly affected is never more than 35 per cent. Eight per cent of the children of this age, says the doctor, suffer from insomnia, the prime cause of which is undue excitement. In the higher boys' schools, in which the pupils are obliged to practice gymnastic exercises, and in which on such occasions no lessons are taught in the class rooms during the afternoon, the percentage of sufferers from some ailment varies from 20 to 35 , whereas in those schools in which there are no compulsory gymnastic exercises, and in which the pupils are obliged to study every afternoon, the percentage is as high as 79 .

In these latter schools 18 per cent of the boys complained that they could not sleep at night. In conclusion, the doctor says that there are two main causes of these evils. One is because too much labor is imposed on children-he cites, for instance, the number of children who are obliged to remain indoors studying music-and the other is because in too many schools no steps are being taken to improve the physical condition of the pupils.

Oliver J. D. Hughes, United States Consul.
Coburg, Germany, January 10, 1901.

## RIGHT TO CONFER DEGREES GIVEN TO TECHNOLOGICAL SCHOOLS.

I have the honor to report that the Royal Bavarian School of Technology at Munich, one of the most frequented institutions of its kind in Germany, wholiy independent of the University of Munich, has been granted by royal decree-
(1) The rigbt to confer hereafter the diploma of civil engineer (Diplom-Ingenieur), which will entitle its holder to sign himself as Diplom-Ingenieur, and afford him recognition everywhere in Germany as a graduate in engineering.
(2) The degree of doctor, and doctor honoris causa, of technical sciences (Doktor und Ehrendoktor der technischen Wissenschaften) upon those whose attainments in the domain of civil engineering, mechanical engineering, architecture, and chemistry should be held as entitled to the honor of "Doctor Ingenieur."
The festivities held on January 15, 1901, at the Royal Bavarian School of Technology, in honor of the great recognition given this high school of scientific learning, were specially marked by the conferment upon Prince Ludwig, the eldest son of His Royal Highness the Prince Regent, of the honorary doctorate, the first of its kind conferred here.

James H. Worman, U. S. Consul.
Munich, Germany, January 17, 1901.

## INDUSTRIAL SCHOOL AT SONNEBERG, GERMANY.

A new industrial school has been opened at Sonneberg, the home of the Thuringian doll and toy trade. Private donations and government aid on the part of the dukedom of Saxe Meiningen have provided the means necessary for the establishment of this institution.

The massive stone building in which the school is located is 45 meters ( 147.6 feet) long and 15 meters ( 49.2 feet) deep, and stands quite isolated, so that light and fresh air are freely admitted to the large rooms in which drawing and molding lessons are given. Turning, wood carving, modeling of gypsum figures, and the preparation of the various kinds of clay for molding purposes are also taught. Space is provided for the exhibition of gypsum models, drawing patterns, etc. One room is principally used for modeling animals in life size, this being a specialty of the town of Sonneberg. Deserving of particular mention is the practical arrangement of the rooms in which the models and patterns are exhibited. They are separated from the large corridors only by glass and wood partitions instead of by heavy walls, so that not only plenty of light is admitted into the passages, but the visitor is showa at a glance the extent of the work in which the pupils are engaged. The building contains two rooms for the "Handelsfachschule" (a school in which commercial apprentices, in addition to the work they learn in the respective offices, are tanght foreign languages, the theory of bookkeeping, commercial geography, etc.). The office of the Sonneberg Chamber of Commerce is also located here.

The exhibition of Sonneberg toys at the World's Fair in Chicago was the subject of general admiration, and at the Paris Exposition it was awarded the grand prize. This remarkable success, it is generally admitted, is to a great extent due to the work of the industrial school, although this has had quarters entirely inadequate for the purpose.
The following table shows the number of pupils during the last ten years.

|  |
| :--- | :--- |

Better accommodations being offered in the new home, the number of pupils is expected to increase considerably.

German exports of toys in 1900 amounted to $50,000,000$ marks ( $\$ 11,900,000$ ), and more than half thereof was produced in the Coburg-Sonneberg consular district. These figures speak in eloquent language of the importance of the toy trade here. In the training of juvenile workers, the bringing up of capable manufacturers, and the creation of new models the school will be of great value.

Oliver J. D. Hughes, Consul.
Coburg, Febmuary 28, 1901.

## CRINIE IN CANADA.

The Dominion statistician has prepared a statement giving the statistics of crime in Canada for the period 1887-1899. For the thirteen years there was an average of 37,250 convictions for offenses of all kinds. In 1899 the convictions were 38,710. Both absolutely and relatively to population, punished crime in 1899 was higher than in 1898, as in 1898 it was higher than in 1897. Of the total number of 484,268 convictions for thirteen years 60,981 were for indictable cffenses, the charges numbering 88,523 , so that convictions formed 68.9 per cent of the charges. According to occupations, the statistics warrant the following conclusions:
(1) That, compared with their numbere, the agricultural class contribute a very small percentage to the criminal class.
(2) That the commercial class commit more than their proportionate numbers in the body politic warrant in the way of crimes under the head of offenses against the currency.
(3) That the domestic class commit crimes just about in proportion to their numbers.
(t) That the industrial class have less than their proportion in all the six divisions of crime, except in offenses against property with violence, where they slightly exceed their proportion.
(5) That the professional class provide a low percentage of criminals.
(6) That laborers contribute more than their share to every class of crime, their percentage being: Crime, 30 per cent; population, 12 per cent.

About 60 per cent of the convicted were born in Canada. As the Canadian-born population is $86 \frac{1}{2}$ per cent of the whole population, the criminals in the Dominion born outside of Canada are more numerous relatively than the Canadian born, forming but $13 \frac{1}{2}$ per cent of the population and supplying 40 per cent of the criminels.
Those unable to read and write formed about 13.8 per cent of the convicted in 1897-1899 period, against 14.9 per cent in the 1887-1889 period. Those possessed of an elementary education were 74.5 per cent of the whole in 1897-1899, against 76.6 per cent in 1887-1889 period. Those having a superior education formed in both periods somerwhat over 1 per cent of the convicted.

Cities and towns furnish 76 per cent of the criminal class of Canada, and the urban population is about 30 per cent of the whole population.

Superintendent Wood, commanding the mounted police in the Yukon, in his report for 1900 points out that crime of a serious nature has been on the increase. Five murders and one case of manslanghter occurred during the year. One of the murderers has paid the death penalty, one is under sentence of death, two are awaiting trial, and the man found guilty of manslaugher is under sentence.

John L. Bittinger,
Consul-General.
Montreal, Canada, April 3, 1901.

## SCHOOL GARDENS IN SWEDEN.

The largest nursery in Sweden is the so-called experiment ground near Stockholm, belonging to the Royal Academy of Agriculture. There are many others, however, in the southern and central provinces; also in the northern part of the Kingdom, as far north, indeed, as Luleå (nearly $66^{\circ}$ north latitude). The methods employed in propagating trees and shubbery are the same as in other countries.

The process of development which gardening in Sweden has undergone of late years is to be attributed in a large measure to the encouraging example of a number of large estate owners and to the interest taken in the subject by the Government, agricultural societies, and private associations.

Besides the two important botanical gardens at Upsala and Lund, which are more especially intended for academic tuition, there are the experiment grounds of the Royal Academy of Agriculture, where many park and fruit trees and ornamental shrubs are raised.

The school for gardeners at the experiment grounds of the Royal Academy of Agriculture and the school of the Swedish Horticultural Society are the chief educational institutions relating to agriculture in the Kingdom. Instruction in gardening is also imparted at the Bergius Gardens, near Stockholm; at the agricultural high schools of Ultuna and Alnarp, and at the schools of agriculture distributed over the whole Kingdom, all these institutions being under the control of the Royal Academy of Agriculture.

The firmest basis for this branch of culture lies, however, in its being made a subject of national education. Gardening is taught at the seminaries for national schoolteachers and at the national schools in the Kingdom. School gardens have been established. The different parishes must grant the necessary ground for these gardens, which contain the usual culinary herbs, a few medical plants, an arboretum, etc. The children are taught the best methods of gardening, and each year they receive trees and shrubs to plant at their own homes.

The agricultural societies employ so-called "master gardeners of the province," who aid the public with advice and information. Horticultural societies, to the number of about twenty, spread all over the Kingdom, and are active in promoting
exhibits, printing and distributing publications, imparting instruction, and supplying plants and seeds.
I give herewith a list of the different school districts, with their respective school gardens, and in conclusion would add that there are no available statistics showing the growth of this system.

| District. | Number. | District. | Number. |
| :---: | :---: | :---: | :---: |
| Hagunda, cte | 71 | Kinna: |  |
| Westra Roslag | 11 | For children | 57 |
| Gestrikland. | 50 | For teachers. | 129 |
| Helsingland | 24 | Asby | 115 |
| Norrkoping: |  | Torna | 79 |
| For children | 27 | Gôieborg | 48 |
| For teachers | 36 | Siranda: |  |
| Gullbergs.... | 42 | For children | 12. |
| Bergslags | 35 | - For teachers. | 18 |
| Wånga .. | 101 | Argermanland. | 3 |
| Väne. | 23 | Oland .... | 17 |
| Willållinge | 153 | Lils ........... | 72 |
| Orebro ... | 45 | Westernorrland | 14 |
| Munktorp. | 82 | derntiand | 4 |
| Norrbärke | 37 | Gellivare | 43 |
| Kinneval. | 9 | Visuy | 33 |

Stockholm, March 26, 1901.
Axtl Georgif, Vice-Consul-General.

## STATISTICS OF CRIME IN GERMANY.

The Imperial German Reichs-Anzeiger publishes interesting figures regarding state prisons in Germany during the last years. Their total number of prisoners amounted to 23,486 in 1900, against 23,454 in the preceding year-i. e., it has remained about stationary (only an increase of 22) in spite of the increase of the population by 1 per cent. And what is most important is that the year 1899 has been the most favorable one in reduction of crime since 1869. The daily average of the two years compares even more favorably. The same amounted to 15,680 in 1900 , against 16,511 in 1899, so that it has not only not increased but even diminished. It is only since the year 1877-78 that a record has been kept of the average number of state prisoners. During these twenty-two years it has never been so low as during the last year. In 1882-83 it had still figured as high as 21,754. The incoming prisoners give us the means of making a general survey of the serious crimes of recent dates. They numbered $5,32 \pm$ in 1900, against 5,826 in 1899. Only persons over 18 years of age can be sent to state prison in Germany.

It is a surprising fact that the number of those who have been more than once in state prison is increasing. Amongst 100 newly brought in male prisoners, 87.3 had already been committed three times to state prison, against 85.2 in 1892-93 and 83.8 in 1889-90. The state prisons in Germany, according to these figures, have by nomeans had an improving effect on the morals of their inmates. They seem to become more and more debased, and as a last resource must be sent to establishments where criminals are committed for life.

A comparison of the favorable and unfavorable moments in the Prussian state prison statistics leads to the following conclusion: The general improvement in the literary and moral education of the people has brought about a diminution of serious crimes, and not an increase, as some pessimists would have it, but the state prisons have not had even the slightest share in this improvement. Therefore it is suggested by some good people that those who really want to improve morals ought not to strive for an augmentation of punishments to be inflicted at the prisons, but they ought to
work toward an increase of the means of educating the common people, and in that way prevent crime.

I have the honor to be, sir, yours most respectfully,
Oliver J. D. Hughes, Consul of the United States of America.

## ILLITERACY IN PRUSSIA.

The number of persons in the Kingdom of Prussia unable to read and write is decreasing constantly.
From the statistics of marriages it appears that in 1882, the first year in which such statistics were collected, 8,414 men and 12,776 women could not sign their names on the marriage contract, or 3.87 per cent of the men and 5.88 per cent of the women contracting marriage.
In 1892 the number of men was only 3,742 , and that of the women 6,077 ; in 1899, men 2,009 , women 3,428 ; that is, 0.70 of the former and 1.19 per cent of the latter.

Richard Guenther, Consul-General.
Frankfort, Germany, April 17, 1901.

Commercial university for Cologne.-Mr. Harris, consular agent at Eibenstock, September 1, 1900, reports that a commercial university similar to the one in Leipzig is shortly to be founded in Cologne, Dr. Von Mevissen, a resident of the city, having donated the necessary funds. (This institution has been opened, May 1, 1901.)

The metric system in Russia.-Under date of September 29, 1900, Vice-Consul-General Hanauer, of Frankfort, writes that according to the St. Petersburg Gazette, the Russian Government has decided to adopt the metric standard of weights and measures, and the ministry of finance is now engaged in considering the time and manner of introducing this reform.

British school of Chinese.-Consul Marshal Halstead, of Birmingham, under date of August 22, 1900, transmits a clipping from the London Daily Express, as follows:

Thanks to the efforts of Mr. Jamieson, ex-consul-general at Shanghai, a school of practical Chinese is now being established in London under the auspices of the China Association, and at the present moment two native professors, who have been brought over from China by Mr. Jamieson for the express purpose, are receiving pupils at their domicile in Maida Vale. The instruction is specially directed to commercial subjects-correspondence, forms of accounts, bills of exchange, etc. Mr. Jamieson's exertions have been greatly impeded, of course, by the recent troubles; but it will be generally conceded that his enterprise is worthy of support by everyone interested in the future of British trade in the Chinese Empire.

A commercial school for Tifis-Consular Agent Harris, of Eibenstock, June 11, 1900, writes:

On the 13th of May, the first commercial school in Caucasia was opened. It has a curriculum which covers nine years. The institute has its own funds, which amount to $\$ 102,800$. The merchants of Tiflis also contribute $\$ 7,000$ annually to its support. The tuition costs $\$ 50$ per capita each year.

After completing the prescribed course in this commercial school, the student may be admitted without further examination to any of the technical universities. He is also fitted to obtain Government employment, and has the further advantage of having to serve only one year in the army.

Commercial university for Basel.-Consular Agent Harris reports from Eibenstock, November 24, 1900:

A commercial university is being planned in Basel. It is to have four departments devoted to commerce and industry, insurance, journalism, and all cognate branches. Thirteen thousand five hundred dollars will be spent yearly for its maintenance, one-third of which will be granted by the Swiss Government as a subjention. Only those are eligible who have completed either the Gymnasium or Realschule. Women students are to be admitted. The course will be of two years' length.

German tradesmen at the Paris Exposition.-Consul Monaghan, of Chemnitz, May 4, 1900, writes:

A motion has been brought before the Reichstag to select men from different trades and send them to the Paris Exposition, in order that they may make a thorough study of the branches which they represent. It is proposed to approprate at least $\$ 75$ for each one. A great many cities and districts in Germany have arranged to send such men to Paris. Some will pay particular attention to hygiene, illuminating appiances of all kinds, methods of transportation, and canalization. The Chemnitz representatives are to study the methods in vogue in London for conserving and utilizing the smoke given off from large factories. A great quantity of the coal consumed in this city is of the so-called soft variety, and gives off a soot that is very destructive to the external appearance of houses. The German experts will also converse with the representatives of the exhibiting nations and find out what their countries are most in need of. The knowledge acquired by these men will be of unquestionable value in the development of German industrial life.

United Stutes school methods for Guatemala.-Under date of January 11, 1901, ConsulGeneral McNally, of Bogotá, sends translation of a recent Executive decree providing that two male and two female teachers shall be sent to the United States to study the methods and system adopted in its establishments of learning. The expenses involved are to be defrayed by the State.

Techological University for Breslau.-Consul-General Guenther, of Frankiort, February 21, 1901, reports that a number of the chambers of commerce of the province of Silesia, as well as the industrial and trade associations and the common council of the city of Breslau, the capital of the province, have petitioned the Prussian Government to establish a technical high school at Breslau. The petitiou, says the consul, states that the need of such a school in eastern Prussia is nowhere so great as in the province of Silesia, and that no other city is as well adapted for its location as Breslau.

Education of German children in foreign countries.-Consul Hill, of Amsterdam, Narch 19, 1901, reports that, in a recent German appropriation bill, provision has been made for subventions for 125 schools for the German education of German children in foreign countries. For a school at Constantinople, $\$ 7,140$ is allowed; for three schools at Buenos Ayres, $\$ 4,284$; for one at Galatz, $\$ 2,665$; and $\$ 2,380$ for a high burghal school and $\$ 238$ for a deacon school at Antwerp. A high school for girls at Brussels also receives $\$ 2,380$. Four schools at Bucharest together receive $\$ 2,380$. A school at Pretoria is granted $\$ 1,428$, and one at Johannesburg, $\$ 2,522.80$. There are 29 German schools in Brazil, 12 in China, 12 in the British colonies, 12 in Roumania, 11 in Egypt, etc.

Public libraries in Germany.-Consul-General Guenther reports from Frankfort, March 25, 1901:

The Daily Review, of Berlin, states that the Government of Prussia is in favor of establishing public libraries. For cities permanent libraries and public reading rooms will be maintained, while for the rural districts movable libraries are recommended. Many districts have already voted adequate appropriations. The Government will also give financial aid.

## CHAPTER XXVIII.

## SOCIOLOGY AT THE PARIS EXPOSITION OF 1900.

By Lester F. Ward.CONTENTS.

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No trath is more familiar in these days than that ideas can not take root and grow until the public mind, which constitutes their natural soil, is prepared to receive them. The converse of this is also true, that when there is such readiness to welcome thought it will take root and grow if daly sown. But some ideas.are not like the germs of the air, that are everywhere ready to sprout at any point where the conditions will permit. The best thoughts are rather comparable to the golden grains of wheat-scarce, expensive, and needing to be sown with intelligence and care. It is somewhat so with sociological ideas, and a Paris exposition seemed to be needed as a laboratory culture for their artificial germination.

## THE SOCIOLOGICAL MOVEMENT.

That a widespread interest in the deeper problems of social life has been gradually and increasingly taking possession of the public mind in all civilized countries has become a matter of common observation. The only question with regard to it which it is now thought necessary to discuss is that of its cause or underlying principle. With this it is perhaps not necessary to deal here further than to remark that it must be in great part due to the increasing extent to which the people of all nations are participating in what are known as public affairs. The number of persons of a thoughtful or philosophic turn of mind bears a somewhat uniform proportion to the whole mass of the people,
regardless of race, nationality, or social position, and in proportion as larger numbers are admitted to the broader fields of public affairs, in the same proportion will the number be increased who are capable of looking at the deeper aspects of public questions. To this may be added the fact that can no longer be doubted, that the political liberty which has so long been the highest aim of mankind, now that it has been to so great an extent attained, proves somewhat disappointing. It was supposed that political liberty would, if fully secured, remove the greater part of the evils under which society was laboring and usher in an ideal state of human existence. This dream has not been realized, and the more farsighted of all nations have become satisfied that no conceivable degree of political perfection can ever accomplish this result. In the prolonged struggle for freedom the only oppression that was recognized was that of government or the state, but now that the yoke of political rulers has been so completely lifted from the necks of the people of enlightened nations, it is found that there are other forms of oppression, and that man is still far from free in that ideal sense in which that word was wont to be used. Among the increased numbers whom the attainment of national freedom has brought to consciousness, and who have proved capable of analyzing the conditions of existence, there are many who see that this is what was to be expected. They see that while the millennial state can not be expected to be attained, there is another step which must be taken in the same general direction in which the world has been moving, and that political freedom having been so nearly realized, the next aim must be the attainment of social freedom. In other words, it is perceived that the nature of man is primarily egoistic and only secondarily altruistic; indeed, that this should be so and is no reproach to mankind, since it is the condition under which alone the race could have developed. The fact, however, necessarily leads to a certain amount of evil in society. This evil is for the most part beyond the reach of legislation and all state agencies, and belongs to the class which is recognized as social in contradistinction to the political evils from which the world has suffered.

It had long been taught, and is still largely believed, that social evils are incurable, but this doctrine has latterly been called in question, and there is no doubt that the growing skepticism on this point has greatly stimulated the study of social science. The time has now arrived when an old-school economist who holds to the irremediable character of social evils is looked upon much as would be a physician who should reiterate the view that once prevailed that plagues and pestilences are wholly beyond the reach of human art to arrest, remove, or prevent. Those who perceive these deeper truths of society, whatever they may call themselves, are sociologists, and their number and importance are increasing very rapidly.

But these practical considerations are not the only ones that have contributed to bring sociology into prominence. The human mind is no constituted that the study of any real problem soon yields its own satisfaction and leads to research and discorery for their own sakes. Indeed, so difficalt and complicated are social phenomena that many abandon at once all thought of putting their results to any practical use and pursue their investigations for the sole purpose of arriving at truth. In the present state of the science this is perhaps the wiser course. At any rate, this class of investigation is now furnishng the stimulus required to keep a large and respectable corps of pure sociologists at work.

This is not the place to write the history of sociology as a science, or even to give a rapid sketch, such as that contained in the preface to the second edition of my Dynamic Sociology in 1897 (pp. r -viii). Much, however, has been done in the past three years, and an excellent summing up of the general results, from the pen of Prof. F. H. Giddings, may be found in the International Monthly for Norember, 1900.

All the countries of the civilized world are contributing to the scciological movement, but the activity is greater in some than in others. It is perhaps least in England. In Germany it has a distinctive character, with a tendency to evade the name of sociology. It is very marked in Italy and Belgium, slightly less so in Switzerland and the Netherlands, perceptibly on the increase in Spain and Portugal, and not wholly absent from several South American States. In the United States this activity is most intense and very real and carnest. But there can be no doubt that it is in France, which was also the cradle of the science, that sociology has taken the firmest hold upon the thinking classes, and it is there that we find the largest annual output, whether we confine ourselves to the literature or inchede in our enumeration the practical applications of sociology in the form of institutions, such as the Musée Social, for carrying on lines of operation calculated to educate and enlighten the people in social matters.

Under these circumstances it was especially favorable to the progress of sociology that there should be held in Paris during the last. year of the nineteenth century a great universal exposition, calculated not merely to concentrate at the French metronolis the products of human invention, industry, and achievement in all parts of the world, but also to attract there and bring into contact and cooperation the men, the talents, and the ideas of all nations.

In the broadest sense of the word an exposition is wholly and essentially sociological. It brings together for examination and comparison the products of human genius, wrought by man in a social state, which
would have been wholly impossible but for his association and cooperation under the operation of the sociological principle of the division of labor. From that point of view to write up the sociology of the Exposition would be to write up the Exposition itself. This, of course, is wholly beyond the scope and plan of this sketch. It will be done by a large number of specialists in the different groups and will form the solid monument of the Exposition. A single one of the numerous groups may be mentioned, viz, that of social economics, but the details of it must be left to those who had the exhibits in charge. So far as our own country is concerned, this subject is in the best of hands, and a report will be prepared that will do it full justice. The present paper must rise to a more general plane and deal with those wider educational aspects presented by the Exposition as a whole.

Before leaving the matter of special exhibits, however, there is one feature almost wholly peculiar to the Paris Exposition of 1900 which demands emphasis at least, although here also the final treatment is fully provided for and will be given in the proper time and way by those who have so successfully inaugurated and carried on the movement. I refer to the part taken by the International Association for the Adrancement of Science, Arts, and Education. The origin and history of this important organization are fully set forth in its several bulletins, especially in Bulletin No. 1. An Anglo-American, a French, a German, and a Russian group were organized at the Exposition, with headquarters in the Palais des Congrès, and active operations were carried on throughout nearly the whole period. The purpose was essentially educative, the principle being that of bringing directly home to those participating the lessons of the Exposition. It was felt by the organizers of this association, and it has long been felt by many who have observed closely the nature and influence of these world exhibitions that are becoming such a feature of our times, that they are not doing as much good as they might be made to do. The throngs that attend them do indeed carry away much that is valuable toward the general enlightenment of the world, and their influence in breaking down national prejudices and unifying and civilizing all nations and peoples has not been exaggerated. But the results bave thus far been general and, one may truly say, superficial, compared with what they might be if means existed for making the facts and the truths which are thus spread before the public penetrate more deeply and take root in the minds of those who go and observe them. In other words, such exhibitions are in fact vast object lessons, but, like all other object lessons, there is needed in most cases a certain amount of direction and concentration in order that the lesson be really learned. To the ordinary undisciplined visitor they present a sort of chaos, strange and interesting though it may appear, but without definite relations and ${ }^{\circ}$ so vast and manifold that the mind despairs of any methodical
arrangement or tangible grasp of its entirety. Most persons therefore go aimlessly through the grounds and carry away only so much as may chance to adhere to their minds by reason of its novelty or striking character.
The association of which we are speaking aimed to segregate certain of the most important portions of this maze of fact and bring it to the special attention of as large a number as possible by means of lectures offered by persons who were masters of their respective departments, and to use the exhibits as professors in modern universities use their specimens to iilustrate these lectures. The plan was to give the lectures in some hall adjacent to the exhibits to which they related, and to follow this up by personal visits by the class to the departments where the objects were displayed, and by oral and tactual demonstrations, not merely of the objects themselves, but of their historical and causal relations and their true meaning to the present state of art and industry.

To speak only of the Anglo-American group, and to mention only a few of the leading examples, we find that under the able direction of that well-known scientific educator, Prof. Patrick Geddes, aided by such competent specialists as Professor Mavor, Prof. Arthur Thompson, and several others of the regular staff, the following subjects, among others, were presented in this doubly effective manner:

By Professor Geddes, "Every man his own art critic," with visits to the Palais des Beaux-Ar's; "The outlooks of science, physical and biological," with experimental demonstrations at the monde souterrain at the Trocadéro; "France in the history of civilization," with visit to Vienx-Paris; "Paris, historic and actual," with visit to the pavilion of the city of Paris, etc.

By Professor Mavor: "Railways and transportation," with visit to the department of transportation of the Exposition; "Gold mining," with visit to the Transvaal mining exhibit; "Canada," with visit to the Canadian pavilion; "The factors of emigration and colonization," with visit to the British, Russian, and French colonial pavilions.

By Professor Thompson: "The zoology of the ocean," with visit to the oceanographic collections, pavilion of Monaco; "Fisher and hunter," with visit to the pavilion of chasse, pêche et forêts; "The web of life," with visit to the aquarium, rue de Paris.

In addition to these two-hour exercises, there were numerous conference visits to the most interesting exhibits, under the leadership of Messrs. Zug, Marr, Michie, Morris, Law, Grindling, Lukens, and others. These visits were not confined to the exposition grounds, but extended to the Louvre, the old market in the faubourg St. Germain, to the annex at Viacemes, and to the cathedrals of St. Denis, Beauvais, and Chartres.

A number of eminent persons and scientific specialists who visited the exposition were induced to lecture or address the association. Among these were the Right Hon. James Bryce, vice-president of the British group, to whom a reception was given in the United States pavilion on September 14; Mr. N. P. Gilman, who lectured on "Profit sharing," followed by a visit to the social economy section; and Prof. A. S. Bickmore, who spoke on "Geographical education and the Hawaiian Islands," with lantern photographs, and showed the class through the Hawaiian exposition in the west Trocadéro; and Mr. Lester F. Ward, who lectured at the Trocadéro on "The dependence of social science upon physical science."

From this incomplete sketch it is easy to see how much more the exposition must have meant to those who availed themselves of its advantages than to the average visitor. The effect was clearly educative in a high degree, and the entire scheme was essentially sociological.

## THE AUXIMARY CONGRESSES.

Although, as already remarked, a universal exposition, as a civilizing and socializing agency, constitutes a grand object lesson in sociology, still its very magnitude precludes all attempt to treat its material aspects in a paper like the present, which must confine itself in the main to those more immaterial and ideal or ideological features which naturally present themselves in connection with such an enterprise. The multitudinous exhibits, illustrating the inventive power of the world, form a material basis for the development of thought. The suggestive power of such a concentration of the products of genius is enormous, and the ideas that grow out of them can not be confined to the practical applications of machines and instruments, however ingenious and important. These ideas swarm in such an environment and fertilize one another. They combine and recombine, forming groups within groups of compound conceptions, which arrange themselves in a vast hierarchy of thought. Then this generalized and integrated mass differentiates and specializes until every distinct body of knowledge or science underlying and making possible the several discoveries, inventions, arts, and mechanisms represented in the exhibition demands separate expression. This demand is supplied by inaugurating an extensive series of special organizations or congresses to meet in connection with the exposition and discuss the principles that underlie all branches of development. And since all this has to do with the progress of civilization in the social state of man, it may be said of these congresses, as it was said of the exposition itself, that they are all sociological in the widest sense of that word. But as they represent all the sciences, and as it is convenient at least to consider
sociology as one of many sciences and restrict it to the more specifically social phenomena, it is possible to indicate which ones of the numerous congresses more properly fall within this designation.

The total number of congresses enumerated in the original official list published in 1899 was 105 . A considerable number were subsequently added to this list, some of them important, such as the congress of socialists. How many of these should be classed as sociological would depend upon the scope given to the term. Some of the lists published go as high as $\frac{10}{4}$. Such lists include a number of congresses devoted to special subjects and various reform morements. At the same time a number of congresses which would not be regarded as belonging to this class, such as the congress of philosophy and that of ethnology, had sections of sociology. All the educational congresses are classed by some in the sociological group, and there are two of these which certainly belong there. These are the congress for instruction in the social sciences and the congress of social education. Similar as the mames of these two congresses sound, they had quite different objects. The first of these was much the more important and demands special treatment here.

## Congress for Instruction in the Soctal Sciences.

This congress, which was organized under the patronage of the Collège libre des sciences sociales of Paris, met on July 30 in a special and temporary pavilion of the Palais du Sénat in the Luxembourg, and continued in session till August 3. It was admirably planned many months in adrance and on a broad and liberal, distinctively international basis. It had for its president Dr. Ernest Delbet, deputy, director and professor of positive sociology in the Collège libre, and for secretary, Mlle. Dick May, who is also secretary of the Collège libre and lecturer on social economics. The committee of organization cousisted of the following eminent educators, authors, and men of science and letters:

## Committee of Organization.

President, Dr. E. Delbet, depaty, director of the Collège libre des sciences morales.

Vice-presidents, MIM. Émile Bontmy, director of the École libre des sciences politiques; Glasson, dean of the facuity of law of the University of Paris, and Léopold Mabilleau, director of the Musée social.

Secretary, Dick May, general secretary of the Collège libre des sciences sociales.
Adjunct secretary and treasurer, J. Bergeron, secretary and treasurer of the Collège libre des sciences sociales.

Members: MM. Aulard, professor in the faculty of letters of the University of Paris; Bouglé, maitre de conférences in the faculty of letters of the University of Montpellier; Bourguin, professor in the faculty of law of the University of Lille; Buisson (Ferdinand), professor in the faculty of letters of the University of Paris; Cambefort (Jules), president of Society of Political and Social Economy of Lyon;

Cheysson (Emile), inspector of ponts et chaussées; Deherme (G.), director of the Coopération des idées; Durkheim (Émile), professor in the faculty of letters of the University of Bordeaux; Espinas (Alfred), professor in the faculty of letters of the University of Paris; Fontaine (Arthur), director of labor in the Ministry of Commerce; Fournière (Eugène), deputy; Gide (Charles), professor in the University of Montpellier, lecturer in the faculty of law of the University of Paris; Guernier, professor in the faculty of law of the University of Lyon; Jay (Raoul), professor in the faculty of law of the University of Paris; Lavisse (Ernest), of the French Academy, professor in the faculty of letters of the University of Paris; Leroy-Beaulieu (Anatole), of the Institute; Leveillé (Jules), professor in the faculty of law of the University of Paris; Maret (Henri), deputy; Michel (Henri), professor in the faculty of letters of the University of Paris; Muntz (Eugène), of the Institute; Pascal (Le P. de), lecturer in the Catholic University of Lille; Renard (Georges), professor in the University of Lausanne; Ribot (Théophile), professor in the College of France, director of the Revue Philosophique; Rousiers (de), publicist; Seignobos (Ch.), maittre de conférences in the faculty of letters of the University of Paris; Tarde (Gabriel), chief of statistics of the ministry of justice; Thaller, professor in the faculty of law of the University of Paris; Truchy, professor in the faculty of law of the University of Dijon; Turgeon, professor in the faculty of law of the University of Rennes; Veber (Adrien), member of the municipal council of Paris.

Not content with such a foundation, the movers of the project sent out early in 1900 to leading educationalists and sociologists in all countries a circular couched in the following terms:

Dear Sir: An international congress for instruction in the social sciences will be held at Paris the latter part of July, 1900, under the auspices of the Collège Libre des Sciences Sociales.

The committee of organization named by the commissioner-general of the exposition has drawn up the following programme:

## PROGRAMME.

I. Universities, high schools, special schools; present condition of instruction in the social sciences in different countries; progress to be realized relative to the distribution of information.
II. Secondary and higher primary instruction; present status in different countries; progress to be realized; place that the economic organization of society should occupy in these branches.
III. Popular social instruction; present state of this instruction under its various forms; monograph of a popular curriculum of social studies in the different countries.
IV. Adoption of an international course of social instruction; exchange of personnel between the universities and the schools of different countries; formation of a fund for this purpose.
The committee does not need to call your attention to the several points of this programme, nor to the general interest of a project to which, for the first time, teachers or friends of the new social education will be able to give the fruits of their experience and the wisdom of nations.

Addressing you, sir, as one of these masters, or friends of the movement, the committee would be happy to count you among the members of a committee of honor (comité d'honneur), under whose inspiration they hope henceforth to conduct their preliminary operations, and ultimately to watch over the deliberations of the congress.

Hoping to secure your valued cooperation, the committee requests your authorization to inscribe your name on the list of this comité d'honneur, and begs you to accept, sir, the expression of its high esteem.

This circular was sent out bearing the antograph signatures of the president, the secretary, and as many of the members of the committee of organization as could be got together at any one meeting. The responses were liberal and the cooperation on the part of foreign educationalists and sociologists hearty. The comité d'honneur, when finally made up, embraced the following names:

Comité d'honneur: M. W. de TV. Abney (Captain), director of the Department of Sciences and Arts at the South Kensington Museum; Adams (Herbert), professor in Johns Hopkins University; Altamira (Rafael), professor in the University of Oviedo; Baldwin (J. Mark), professor in Princeton University; Beesly (E.), member of the Positivist Society of London; Brentano, professor in the University of Munich; Bridges (J.H.), associate of the Royal College of Surgeons of London, member of the Positivist Societies of Paris and London; Bryce (James), member of the British Parliament; Bucher (Karl), professor at the University of Leipzig; Buylla (Adolfo), dean of the faculty of law of the University of Oviedo; Clark (John B.), professor in Columbia University, New York; Ely (Richard T, ), professor in the University of Wisconsin; Favon (G.), councilor of state, deputy of the National Swiss Council; Ferrero (G.), professor in the University of Turin; Ferri (Enrico), professor in the University of Rome, deputy of the Parliament of Italy; Fouillée (Alfred), member of the Institute of France; Geddes (Patrick), professor in the University of Dundee; Gierke (Otto), professor in the University of Berlin; Girard-Teulon (A.), professor in the University of Genera; Greef (G. de) [de Greef], rector of the Université Nouvelle de Bruxelles; Gumplowicz (Louis), professor in the University of Gratz; Hedin (A.), deputy of the Swedish Parliament; Hinojosa (Eduardo de), professor at the Diplomatic School of Madrid; Hurtado (J. Piernas), professor in the University of Oviedo; Isaac (Auguste), president of the Chamber of Commerce of Lyon; Kovalewsky (Maxime), formerly professor in the Imperial University of Moscow; Johannis (Jehan de), director of the Institute "Cesare Alfieri" (Florence); Labriola (A.), professor in the University of Rome; Lavroff (Pierre), formerly professor in the Military School of Saint-Petersburg; Lazarus, professor in the University of Berlin; Letelier (Valentin), professor in the University of Santiago; Levasseur (E.), member of the Institute of France; Liard, director of higher education of the Ministry of Public Instruction of France; Loria (Achile), professor in the University of Pavia; Lubbock (Sir John) [Lord Avebury]; Luzzati (L.), deputy of the Parliament of Italy; Marliis (Salvatore Zognetti di), professor of political economy in the University of Turin; Mavor (James), professor in the University of Toronto, Canada; Meitzen (Dr. August), professor in the University of Berlin; Menger (Anton), professor in the University of Vienna; Molinari (J. de), director of the Journal des Économistes; Pareto (Vilfredo), professor in the University of Lausanne; Picard (Edmond), senator, Battonnier des Avocats at the court of cassation, professor in the University of Brussels; Pirenne (H.), professor in the University of Ghent; Renouvier (C.); Roberty (E. de), councilor of state of the Russian Empire; Santamaria (Vicente), professor in the University of Madrid; Schaeffle (Dr.), formerly minister (AustroHungary); Schoenberg (Dr. Gustav von), professor of political economy in the University of Tübingen; Sidgwick (Henry), professor in Cambridge University; Sighele (Scipio), professor in the University of Pisa; Simmel (Dr. Georg), professor in the University of Berlin; Starke [Starcke?], professor in the University of Copenhagen; Stein (Ludwig), professor in the University of Bern; Soldan (Charles),
professor in the University of Lausanne; Sutherland (Alexander); Vandervelde (E.), deputy of the Parliament of Belgium; Wagner (Dr. Adolph), professor in the University of Berlin; Wagner (Ch.), pastor at Paris; Walras (Léon), honorary professor in the University of Lausanne; Webb (Sidney), member of the London county council, director of the London School of Economics and Political Science; Westermarck (Ed.), professor in the University of Helsingiors; Wilson (Woodrow), professor in Princeton University; Wright (Carroll D.), Commissioner of Labor of the United States; Wuarin [Vuarin] (Louis), professor in the University of Geneva.

## REPORTS PRESENTED TO THE CONGRESS.

This, however, was by no means all. In order to insure the success of the congress in advance and fumish a secure and ample basis for its operations, a large number of competent workers in the field of social education were requested to prepare reports on the various aspects of the question as they presented themselres in the light of their own experience. This step was in a high degree successful. Nearly all of these reports were handed in early enough for use at the congress. They were all printed in uniform covered brochures and distributed to the members of the congress as they arrived. As these reports really constitute the solid work of the congress, a full list of them, showing authors and subjects, will give a clearer idea of what the congress meant and actually accomplished than anything else that could be included in the same space. As the subjects are exceedingly varied and heterogeneous, any attempt to classify them would probably prove unsatisfactory, and an alphabetical arrangement by authors, which will at least have the merit of conrenience, is perhaps as good as any other. The following were the reports presented:

Abney, Sir W. de W., director of the department of science and the arts at the British Museum of Natural History, South Kensington, "Technical education in England."

Altamira, Rafaël, professor at the University of Oviedo, "Instruction in the social sciences in Spain." (See p. 1500.)

Aves, Ernest, Toynbee Mall, London, "Present condition of popular social instruction in Great Britain." (See p. 1531.)

Barth, Paul, professor at the University of Leipzig, "Sociological instruction in Germany." (See p. 1506.)

Bernès, Marcel, professor of philosophy at the Lycée Louis le Grand, "Socio-ethical instruction in the secondary schools of France." (See p. 1481.)

Cobden-Sanderson. J., "The 'arts and crafts' movement in England."

Combothecra, X. S., advocate, "On the adoption of an international system of social instuction in Switzerland." (See p. 1496.)

Crouzet, P., professor in the Lyceum of Toulouse, "Present state of popular social instruction in France." (See p. 1470.)

Deherme, G., president of the Coopération des Idées (Université populaire du Faubourg Saint Antoine), "Report on social instruction in France." (See p. 1481.)

Gide, Charles, professor in the faculty of law of Montpellier and of Paris, "Advanced instruction in the social sciences in France." (See p. 1464.)

Gopesa, Ladislas, secretary of the department of worship and publie instruction of Austro-Hungary, "Teaching of the social sciences in Hungary." (See p. 1512.)

Houser, Henri, professor in the University of Clermont-Ferrand, "Note on popular social instruction in Germany;" "Note on social instruction at the Popular University of Vienna in Austria." (P. 1510.)

Hill, Edward Emory, professor of morals and political economy at the Hyde Park High School, Chicago, "The teaching of the social sciences in the high schools of the United States." (See p. 1553.)

La Fontaine, H., senator of Belgium, "Adoption of an international system of social instruction in Belgium." (See p. 1Ł88.)

Lexis, W., "Instruction in the social sciences in Germany." (P. 1508.)

Mahaim, Ernest, professor in the University of Liège, "Present state of adranced instruction in the social sciences in Belgium." (P. 1482.)

May, Dick, general secretary of the Ecole des Hautes-Etudes, Paris, "Formation of an international congress of social instruction in France." (See p. 1560.)

Niceforo, Alfredo, "The teaching of social sciences in Italy." (P. 1503.)

Plunkett, Horace, vice-president of the department of agriculture and technical education for Ireland, "Technical education in Ireland."

Renard, Georges, professor at the National Conservatory of Arts et Métiers at Lausanne, "Progress to be realized in the character and distribution of social instruction in Switzerland." (See p. 1494.)

Sadler, Michael, director of the education department library. "Social sciences in the English secondary schools." (See p. 1517.)

Simiand, François, Agrégé de l'Université, "On the teaching of the social sciences in the primary schools of France." (See p. 1472.)

Suter, A., doctor of law in Switzerland, "Present state of instruction in the social sciences in the universities, high schools, and special schools in Switzerland." (See p. 1488.)

Tchoupror, A., professor in the University of Moscow, "Report on the teaching of the social sciences in Russia." (See p. 1513.)

Thurston, Henry W., director of the section of social sciences and economics of the Normal School of Chicago, "The teaching of the social sciences in the primary schools of the United States." (P. 15566.)

Vittoz, Edouard, professor in the École Vinet at Lausanne, Switzerland, "Study of the present situation and progress to be realized in Switzerland in the primary and secondary teaching of the social sciences." (See p. 1495.)

Waxweiler, Émile, lecturer in the Université Libre of Brussels, "For what object and in what manner to organize instruction in the social sciences, especially in the Belgian universities." (See p. 1487.)

Webb, Siduey, member of the London county council, "The development of commercial education in London." (See p. 1545.)

Winiarsky, Léon, privat-docent at the University of Geneva, "The teaching of pure political economy and social mechanics in Switzerland." (See p. 1496.)

It is of course to be supposed that many others were requested to prepare reports, but were prevented by various causes; and that if all could have responded favorably the general body of information would have been far more complete and symmetrical, its present extremely uneven character would have been prevented, and the glaring omissions that all must perceive would not have occurred. Still these 29 reports represent what it was possible, under the circumstances, to accomplish.

A considerable number of the authors were present at the congress, and were given an opportunity to summarize their results and participate in the discussion of their reports. Among these were Professors Barth, Bernès, and Crouzet, Senator La Fontaine, Professor Mahaim, Mile. Dick May, Professors Renard and Simiand, Dr. Suter, and Professor Waxweiler. Mr. Aves's report was presented by M. de Rousiers, as was also that of Mr. Sadler. Others were discussed in the absence of their authors, but for want of time many were necessarily passed over, but they are in the hands of the members of the congress and will be widely studied throughout the world. Ultimately they will doubtless form a volume that may be secured by all.

It will be impracticable here to give an extended insight into the contents of these papers, but some of them demand special attention as typical of the rest. Moreover, it is of interest to learn from them what is being accomplished in various countries, and it is hoped that the following extracts will justify the space devoted to them. It will be advantageous to take up each country separately, but the order is more or less immaterial. We will begin with

## France.

## REPORT OF NA. GIDE.

The report of M. Charles Gide is largely historical, and in view of his eminence as an educator we give it practically entire.

ADVANCED INSTRUCTION 1N THE SOCIAL SCIENCES IN FRANCE, BY M. CHARLES GIDE, PROFESSOR IN THE FACULTY OF LAW OF MONTPELLIER AND OF PARIS.

Although France, among all countries, had the first fruits of economic science with the physiocrats and of sociology with Auguste Comte, it was almost the last to organize instruction in the social sciences. It may be said that in our country it dates only from yesterday.

The explanation of this anomaly must be sought in the fact that our faculties were not organized with the view of furnishing a really higher education embracing the universality of human knowledge, but only with the view of preparing the students for certain examinations. Thus it was with good reason that they did not bear the title of universities. No course could be conducted by them unless it had previously been assigned a place in the programme of examinations; but this was not the task of the faculties, but of the higher administration. A decree was therefore indispensable to give them the right to teach a new science.

This was the reason why, during the first two-thirds of this century, no other social sciences were taught in France than the strictly juridical (and from one point of view rather exegetic than social) in the faculties of law and history, with a little of morals in the faculties of letters.

There were only three chairs of political economy, all three in special establishments, the oldest one founded in 1819, at the Conservatoire des Arts et Métiers (under the name of industrial economy), and first occupied by J. B. Say; the second founded in 1830, at the Collège de France, and which has had an illustrious line of occupants: J. B. Say, Rossi; Michel Chevalier, Baudrillart; Paul Leroy-Beaulieu, and finally that founded at the École des Ponts et Chaussées in 1846, for Garnier. ${ }^{1}$

In 1864 and 1865 two new courses of political economy were created, but as free courses, at the faculty of law of Paris and at that of Toulouse. In 1875 a third course was instituted at the faculty of law of Lyon.

It was only in 1877 that a new era began for the teaching of the social sciences. It was decided after long hesitation, and not without lively criticisms coming from the professors of law themselves, to make a place for political economy in the programme of examination for the baccalaureate in law. This decision was made in the superior council of public instruction only by a majority vote, the same as the vote of the National Assembly that constituted the Republic. The decree of March 26, 1877, therefore introduced a question on political economy into the law examination of the second year (it was afterwards transferred to the first year to the great detriment of that course), and as a result of the decree courses of political economy were organized in all the faculties of law, and all have since been converted into professional chairs.

It was not very easy to find in the faculties of law a sufficient personnel, for the studies and the requirements imposed upon the candidates for professorships in these faculties did not at all fit them for economic instruction. Nevertheless, among the young agrégés some had a taste for this branch so new for them and brought to it certain mental qualifications, especially a tendency toward state intervention, which greatly frightened the economists of the laissez faire school, until then the only school that taught, one might almost say the only official school in France. The establishment in 1887 by a group of professors of law of the Revue d'Économie Politique, opposed to the Journal des Economistes, emphasized this schism.

In 1889 the science of finance, which had already been taught by M. Alglave at the faculty of law of Paris since 1879 (and had even been taught by him at Douai in 1872), was introduced in the form of an elective course in the third examination for the degree in law, and all the faculties of law hastened to introduce this new branch.

[^37]In 1895 was made a great step in advance. The old doctorate in law was divided up and a new doctorate "ès sciences politiques et économiques" was instituted by the side of the juridical doctorate. An entire programme was established for this new doctorate, which included three obligatory courses-political economy, history of economic doctrines, science of finance; and three optional courses-industrial legislation, colonial legislation, rural legislation. All the faculties in order to maintain their doctors and prevent their desertion to the advantage of Paris, hastened to create the three obligatory courses and one of the three optional ones, generally the first. Unfortunately the inadequacy of their teaching force compelled them for the most part to intrust these courses for doctorships to professors already charged with professional courses and often even to jurists. The appropriations for public instruction, although much increased, were in fact far from able to enlarge with the same rapidity as the number of courses.

As the number of professors appointed to teach the economic sciences in the faculties of law increased, the system of recruiting these professors became manifestly inadequate and obsolete. In the same way, therefore, as they had divided up the doctorate they now divided up the group and instituted a group of economic sciences. It has been in operation for five years, and, thanks to it, we see rising in our faculties of law a nursery of specialists.

Thus far we have only spoken of the faculties of law. This is because in fact nothing had been done for the teaching of economic and social sciences outside of these. It is only in an exceptional way and through the individual initiative of their members that the faculties of letters had inaugurated certain courses that related to these matters. But there is probably going to be a change through the establishment that is being urged of a purely economic doctorate which shall be accessible to the licentiates (candidates for the master's degree) in letters or in the sciences as well as to those in law, and which shall be conferred by the professors of the three faculties combined, or of two of them, at least. The result will certainly be the introduction of regular courses in economic or social science in the faculties of letters.

The special schools, which are very numerous in France (much too numerous, since it is their competition that empties our universities, at least in the faculties of letters and of the sciences), almost all inscribe on their schedules courses of political economy and economic geography. We shall enumerate them presently. Nevertheless, economic and social sciences have no place in the principal of these schools, viz, the normal school, whence come almost all the professors of letters and of science for the faculties and for the higher classes of lyceums. This defect is great and all the more unfortunate, as the professors of these faculties have to do their share in the teaching of economics, as we have just said, and as the professors in the higher branches in the lyceums are already obliged to give some notion of them to their students, especially under the modern régime.

Independent instruction ${ }^{1}$ has not been able to take on a high development in France on account of the monopoly that the university possesses (from the fact that it alone prescribes the examinations and gives the diplomas). Nevertheless, it has done its full share in the teaching of the social sciences, precisely because it has sought to develop at just those points where official instruction was weak.

It is necessary to place in the first rank, as well in chronological order as in order of importance, the École Libre des Sciences Politiques, founded by M. Boutmy in 1871, the day after the fatal war, and which, from that date, has organized a very complete course in the economic sciences, especially from the practical point of viewpolitical economy properly so called, finance, economic geography, statistics, etc. It is certain that this competition has exercised a very salutary influence on the development of these same branches in the faculties of the State.

The Catholic universities, which are four in number, have modeled their schedule on that of the faculties of law so far as regards the teaching of economic sciences. Nevertheless, one of them, that of Lille, created in 1893, as an annex to its faculty of law, a section des sciences sociales et politiques, which really offers one of the richest and most varied courses that we have in France. We note, for example, in the catalogue of 1898-99, besides the regular courses similar to those of the State faculties of law, the following courses: The church and the financial questions of the nineteenth century; critical exposition of socialism; the public credit; professional syndicates; religion in prehistoric ages; first historic appearance of man; the world of prisons. And for 1899-1900, origin of the cooperative movement; work done (apostolat) by Catholic missions; the social movement in Fngland and in Switzerland, ete.
These courses, it is true, include only ten to twenty lectures, but meetings for the discussion of social subjects and funds for travel promise to render such instruction fruitíul.
The Collège Libre des Sciences Sociales was founded in 1892. Its very eclectic programme consisted in combining the representatives of all the economic and social schools in order to have taught by each professor what he should believe to be the truth. There resulted a very varied but somewhat glittering programme. The courses are very numerous and very raried. They include only ten lectures each. Unfortunately the attendance is not numerous. In 1889, through the initiative of the general secretary, Mademoiselle Dick May, a school of morals and a school of journalism were annexed to this college. Finally, after some internal difficulties, a new establishment is in process of organization under the name École des Hautes Etudes Sociales. ${ }^{1}$

To this enumeration should be added a considerable number of independent courses or lectures bearing on social questions, and which are organized either by private associations, such as the political economy societies, the societies of the friends of the universities, or by groups called popular universities, which nearly correspond to what is called in England university extension, and which have been multiplied this year, as well in the provinces as in Paris, with characteristic French enthusiasm.

After this historical résumé, let us now give a comprehensive view and recapitulation of all the courses devoted to the social and economic sciences. We will leave out of consideration the courses of law, properly so called, to the number of more than two hundred, distributed among all our faculties.

1. Elementary political economy is now taught from forty chairs, viz:

In the fourteen state faculties of law (Lille, Paris, Caen, Rennes, Poitiers, Bordeaux, Toulouse, Montpellier, Aix, Grenoble, Lyon, Dijon, Nancy, Alger);

In the four Catholic faculties of law (Lille, Paris, Angers, Lyon);
In twenty special schools: École des Ponts et Chaussées, École des Mines, École des Postes et TPélégraphes, École d'Architecture, École des Hautes Études Commerciales, École Supérieure du Commerce, Institut National Agronomique, École Libre des Sciences Politiques, and in all the écoles supérieures de commerce in the provinces.
Advanced political econorny, i. e., limited to certain parts which the professor treats with more detail and which he changes from year to year, is taught in all the state and Catholic faculties of law which we have just enumerated, as courses for the doctorate. We place also under this head honoris causa, the course which is given at the College of France.

This instruction includes only a single course by the faculty, eren at Paris, which is surely insufficient for an "enseignement approfondie" of political economy, for, even

[^38]admitting that the professor devotes ten or fifteen years to the successive exploration of each part of his science, the students at least can not follow him in his long wanderings, and he would be precluded from ever becoming a specialist. It must be added that in the provinces the professor charged with this course is generally himself the one who gives the licentiate course, and who gives this one as something extra, and that the number of attendants (candidates for the economic doctorate) is often exceedingly limited. For all these reasons it may be said that the really advanced courses in political economy-that is, those that constitute monographs, as it were, in which the professor exhausts the subject to its utmost possible limit-are extremely rare in France.

Nevertheless, certain courses of the École Libre des Sciences Politiques, nearly answer to this definition. We cite, for example, in the programme of this year the course of M. Arnauné on credit and exchange, or that of M. Tarde on economic psychology.
2. History of economic doctrine is taught in the same number of schools and in the same faculties as the course of political economy for the doctorate. It is not taught at the College of France, but it can claim two free courses at the Sorbonne-history of social economy by M. Espinas (who only treats the history of ideas) and history of political doctrines by M. Michel; also a course at the École Libre des Sciences Politiques, given since its foundation by M. Dunoyer, and several courses at the École Libre des Sciences Sociales.

This instruction is given with more care than the course of so-called advanced political economy. It seems better to suit the ideological temperament of the French, and the fellows in law seem particularly adapted to it on account of the critical and exegetic habits of mind which juridical studies have developed in them.

Unfortunately the students can only derive a very limited advantage from it. In fact, it is customary to question them at the examination only on the course of one single year; but this course embraces only a very small part of the history of the doctrines, as the professor generally devotes several years, perhaps five or six, to expounding it in its entirety. I have seen in several faculties of law in France many successions of doctors of economic law who had only taught the history of the doctrines down to the physiocrats, to the exclusion of everything later. They would have been incapable of saying who Sismondi was, or Bastiat. It is not the regulations that are responsible for this abuse, for they expressly say that the candidate shall be interrogated on all the subjects of the programme; but it is the professors, because they fear that the students may not have any interest in following their courses from the time that the examination no longer necessarily bears on the special part that they have treated.
3. The science of finance counts a number of courses double that of the preceding, for we recall that it figures at once on the programme for the licentiate in law and on that for the doctorate, although, as a matter of fact, this double instruction is generally given by the same professor-at least outside of Paris.

There must still be added to the courses of the law faculties quite a number of courses and of special lectures on finance given at the École Libre des Sciences Politiques. Thus, for the year 1900, we note the following courses: Public finance; budgetary legislation of France; fiscal legislation of France; rules of public accountability, and two conferences-one on foreign finances, the other on registration (enrégistrement).
4. Industrial legislation is taught in all the faculties of law (courses for the doctorate). The professors of law have usually evinced remarkable aptitudes in this branch. They have brought to it a very advanced and very democratic spirit. Some of them have already won for themselves a deserved reputation as specialists in it. Moreover, the fruits of these teachings are manifesting themselves through the very large number of theses for the doctorate presented on these topics.

There are also courses on industrial legislation at the Conservatoire des Arts et Métiers, at the École des Mines, at the Institut Industriel de Lille, and in several écoles de commerce.
5. Colonial legislation, or rather colonial economy, is not taught in all the faculties of law, but only, if we mistake not, in Paris, Nancy, Lyon, Bordeaux, Poitiers, Remnes, and Algiers. There are, in fact, two courses in the faculty of law of Paris and at the École Libre des Sciences Politiques. There is also at Paris a colonial school which gives three courses in colonial economy (French and foreign colonies). There is another course of colonial economy or history in the faculty of letters of Algiers.
6. Rural legislation, or, better, rural economy, is tanght only in a still more limited number of faculties-Lilie, Lyon, Toulouse, Poitiers, Rennes, Caen. There is none even at the faculty of law of Paris, but only at the Catholic institute. However, this humiliating omission has just been supplied as we write these lines, at the end of the scholastic year, in extremis, by a free course.

But rural economy is taught at the Institut National Agronomique of Paris, in the four or five national schools of agriculture, and even in the thirty-six practical schools of agriculture; only there it is no longer a branch of social science, but simply technical.
7. Colonial geography is not taught in the faculties of law, as is readily understood, but it is taught at the Sorbonne by M. Marcel Dubois, and at the faculty of letters of Bordeaux. The course given at the College of France by M. Levasseur also comes under this head, although its field is somewhat indefinite. Moreover, it is taught at the École des Hautes Études Commerciales, in all the Écoles Supérieures de Commerce, and at the institut Industriel of Lille. ${ }^{1}$
8. Social economy, meaning by this the study of social reforms and practical means of realizing them (mutuality, cooperation, assistance, state intervention, patronal institutions, etc.), is only taught in two courses-one at the faculty of law of Paris, the other at the École des Sciences Politiques by M. Cheysson. The first, however, is only a free course; the other takes place only every other year, and the origin of both is somewhat accidental, since both are the foundations of the Comte de Cham-brun-that of the Ecole des Sciences Politiques in 1893, that of the faculty of law in, 1898.
9. Pedagogy, or the science of education, is taught in a chair at the Sorbonne by M. Buisson, and in some faculties of letters (Lille, Toulouse, Algiers). Some professors of philosophy devote a free course to it from time to time.
10. Statistics counts only one official chair, created at the faculty of law of Paris in 1892, and a few temporary courses at the Ecole des Sciences Politiques.
11. Anthropology is taught in one single special independent school, the École d'Anthropologie, and nowhere else. The same for demography, which may be considered an adjunct of the preceding.
12. Sociology is not taught anywhere in the form of a regular course, which may be justified by the still rather badly defined character of that discipline-I dare not say of that science. Nevertheless, it is taught as a free course by three professors of philosophy of the faculty of letters, MM. Durkheim at Bordeaux, Bouglé at Montpellier, Bertrand at Lyon, and by one professor of the faculty of law at Toulouse, M. Hauriou.

Such is a condensed view of instruction in the social sciences in France in 1900. It does not call for extended comment.

The whole forms a rather respectable assemblage of nearly two hundred courses, and indicates a truly admirable effort, if we remember that nearly all of them have

[^39]been created within twenty years. And what is still more remarkable is the multiplicity of social lectures, due to private initiative, which propagate themselves like fuses over all parts of France. In certain workingmen's quarters of Paris there are several every evening, and in certain cities of the provinces there are several every week. They are generally well attended.

But the gaps in the series are striking also. The most astonishing is the absence of any regular instruction in the history of political economy. I do not say the history of the doctrines, but that of the facts, which to-day in the eyes of many economists constitute the whole of economic science. Thus, in the German universities the courses in economic history are as numerous as those in the history of doctrines are rare. It is really difficult to explain why the authors of the decree of 1893 introduced into the programme of the new doctorate the history of doctrines rather than economic history. It is probable that it is not for reasons of a scientific order, which it would be dificult to justify, but simply because they were govemed by the programme of the Ecole Libre des Sciences Politiques, which only embraced this course in the history of doctrines.

Nevertheless, there are in almost all the écoles supérieures du commerce (Paris, Lille, Havre, Bordeaux, Nancy, and at Marseilles), as a branch of the faculty of letters, courses in the history of commerce, and a course in the history of labor has just been established at the Conservatoire des Arts et Métiers by the city of Paris. One may cite also here and there, as entering into this department, certain free courses given in the faculties of letters-for example, those of M. Stouff at Dijon: Le commerce d'argent dans l'antiquité, etc.

Another great lacune is the absence of all instruction relative to method in economic science, and more especially relative to mathematical political economy. It is really humiliating to think that in France, a country which occupies a prominent rank in the mathematical sciences, and which, with Cournot, inaugurated mathematical political economy, there is not a single course on this subject, probably not even a single professor who would be capable of giving it. And by a singular irony, it happens that this branch has been brilliantly represented. at Lausanne during twenty years by a Frenchman, but who is known throughout the world as a Swiss! M. Walras.

The inadequacy of the instruction in the subjects of statistics, of sociology, and of social economy, is also manifest.

Finally, there is reason for expressing regret that in the teaching of law itself, although it is very complete and very rich, such an important side as economic law should be completely neglected. There is not, to our knowledge, a single course which treats from the economic point of view, properly so called, the régime of property, or that of successions (inheritance), or that of mortgages (hypothèques). Let us mention, however, as a laudable attempt in this direction, a course given this year at the faculty of law of Montpelier, by M. Charmont, on corporative property, and also a course announced at the École Libre des Sciences Politiques, by M. Fiach, on the law of property (droit de propriété).

Comment upon this admirable report of M. Gide is unnecessary. It is a clear summing up of the history and present state of social instruction in the higher institutions of France by an able economist who has devoted his life to the cause. No one can rise from its perusal without the sense of edification on a subject, which, on account of the complicated and anomalous character of the French universities, is very difficult for foreigners to master. M. Gide did not arrive at the congress until the last day of the session, and his report was not discussed. While all of course knew that only an able paper could
emanate from such a source, members who did not take the trouble to read the report could have only a general idea of its value. There was therefore this additional reason for introducing it in full here, although its intrinsic merits are alone a sufficient justification for doing so. Its value, however, is still greater for those who did not attend the congress, and it will be appreciated by educators outside of France.

## REPORT OF M. CROUZET.

The report of M. Crouzet, professor at the Lyceum of Toulouse, on the present state of popular social instruction in France, is of a very different character. It deals with secondary and to some extent even with primary instruction, is not historical but critical, and aims to point out the lines along which popular education may be made to strengthen the civil state. It was expounded to the congress by the author and thorougbly discussed. It will not be necessary to introduce it entire, but only to present the author's point of riew and general conclusions. He introduces the subject as follows:
Since the organization of the Republican School in 1880 the École du Soir <night school) for the illiterate and forgotten classes has keen completed, and followed up by the École du Régiment for youths prone to go astray, until it was finally perceived that it is not sufficient to form good scholars and good soldiers, but that in order to make good citizens a truly social education should be a part of the École à la Vie (school of real life).
The three questions that have specially agitated France--the patriotic question, the political question, and the social question-have been equally met by national edrcation, as well primary as secondary. Soldiers have been trained, voters indoctrinated, and workingmen organized, but citizens have been inadequately molded.
Under the weight of the disaster of 1870 , a reparatory mission was intrusted to the school, without taking care that the country might one day become an object of exploitation and that a blind and mistaken patriotism might become an obstacle to progress. These legitimate but absorbing patriotic preoccupations combined with the inadequacy of political instruction to prevent the Republic from bearing its full fruit, to render it more conservative than truly democratic. Narrow, intolerant, and despotic political conventions were able to control politics for their own ends, and thus politics too often became, not the reign of ideas and public interests, but the triumph, albeit ephemeral, of fine phrases and demagogues. What wonder after this that the great majority of voters should be divided between indifference and hatred, two sentiments equally destructive of true social life.
On the other hand, in restoring the individual to himself, but also in abandoning him to his own resources, the republican conquests of liberty and equality have made him an easy prey in the economic struggle. In vain has the workingman, feeling his material, intellectual, and moral value reduced by the political machine, had recourse to trades unions, unfortunately too much restricted in their horizon; it is still too often the crushing of the weak by the strong, which is the morality of the struggle for existence.
Thus on three sides have risen ferments of hatred. Country, Republic, labor, made to unite us, have rather separated us, and distrust of others is perhaps to-day the most characteristic French sentiment. It is the reason for being of social education which would insure to the idea of union for life a success as rapid as that which
the struggle for life has had, and in short, would make solidarity a conscious and active principle of the race.

It starts from a principle of justice, that of giving to all the same means for the free exercise and expansion of their faculties, in order to secure the utmost realization of justice through the consecration of their own powers to the welfare of all. To make individuals strong accomplishes partial justice, to make them at the same time social will accomplish entire justice.

From this point of view popular education dates from yesterday. It is chieffy practical considerations that govern the night schools and the adult courses. Patriotic and moral sentiments control the work that follows school life. In the École au Régiment the economic and political spirit actuates the groups of workingmen. Recently the social spirit has penetrated, transformed, and enlarged everything, embracing all ages and all classes, and is inspiring them with a spirit of fraternity.

Everywhere there is activity in this renovation of civic life to render it rational and solid. But there are efforts which I will pass over in silence; these are sectarian efforts (very inferior indeed to the others), because they run counter to necessary republican work. One scarcely knows how, in fact, to develop the reason among citizens where the effort is less to instruct than to direct them; and, on the other hand, it is not in the name of an exclusive faith that can best be realized the social concord which forms the basis of the lay spirit.

Lay social activity is abundant and varied. It is even one of the pleasures of its study to find neither intolerance nor monotony, but liberty and variety, such as is to be expected from free creative initiative.' But all things, though infinite in number, support one another, and if we detach an organ in order to study its operation we must in thought restore it to the whole to put it in its true light.

Thus rather than impose upon social education a uniform method which it does not acknowledge, and which would drive away those who do understand it, it is necessary to follow it wherever it manifests itself-in the school; around the school; outside of the school-to study it everywhere in theory and practice, according as its effectiveness is internal or external, as it acts on custom or as custom acts on it, prepared to gather the general and comforting impression of active and conscious fraternity in its march toward social justice.
M. Crouzet proceeds to develop the subject from the three points of view outlined, displaying a thorough familiarity with all its aspects. His report will be read in France with great interest, but space will not warrant its reproduction in full in this place, and we will content ourselves with a few of his general conclusions:

The historical and social sciences are in the way of throwing light and making the people reflect upon the vital interests of contemporary humanity. Of course, in history and geography the programmes of courses for adults have not always differed enough from the preparatory course ( 5 to 7 years-anecdotes, biographies, stories, travels, etc.), but already a select public (élite populaire) is freeing itself from the influence of mere curiosity and asking for a sympathetic study of the real world, an abandonment of the chauvinism that paralyzes our progress, and an insight into the causes of the existing economic struggle. At the same time it is requiring of history that it study the past in order to prepare for the future, that it enlighten and enlarge the consciousness of the lay and republican spirit of the French people in order to render it worthy of its social mission and competent to perform it. Finally, science is come to move as well as to instruct, to arouse admiration as well as doubt, and especially less to supply the mind with ideas than to fortify it with methods and render it capable of gradually finding the truth, which is the principle of union among
men. Thus through the various subjects of social instruction is worked out the forming of conscious energies and of enlightened enthusiasm, i. e., of citizens. * * *
But there is still an infinite number of results in process of realization or in prospect, each of which has an immense social importance: The awakening and development of provincial life; the revival and elevation of the taste of the people, who have proved that it was corrupt only in so far as those who habitually supplied it rendered it so; the beginnings of a new democratic art existing not for the buyer or the esthete, but for all citizens; civilization and civility extended even to the least refined, which, though they may find some adults callous and wedded to their habits, will readily penetrate the young; the imbuing of the people with the critical spirit as well as with broad ideas; the formation by thinking and living in common of like hearts and minds; the strengthening of the republican sentiment, which sometimes, after a public address, used wrongly to express itself in the cry: "Vive la liste républicaine," but which consoled us at the time when organizers of public evening meetings, under pretext of nonpartisanship, forbade the word Republic; in fine, the creation of a demand for and the introduction into common custom of social education.
M. Crouzet concludes his report with a list of ten of what he considers the most important desiderata (voux). These were taken up seriatim by the congress, discussed, somewhat modified, reduced to eight, and adopted as expressing the sense of the members on the points involved. These desiderata, as thus amended, are as follows:
I. That the relation between the intellectual classes and the people be not one of complaisance, but of fraternity; an active fraternity having for its object really to unite the intellectual movement and the social movement.
II. That educators strive less to impose their programmes than to respond to the desires and needs of the public, always previously consulted.
III. That popular education aim clearly at the diffusion of general culture, and especially of the scientific spirit.
IV. That all popular educators have the freedom to draw up an impartial course of social instruction.
V. That the people be attracted as little as possible by solemn or simply amusing lectures, in order to employ the simplest, the most familiar, and the most practical methods of instruction.
VI. That, in view of the present dificulty of immediately and directly penetrating compact masses, social education adopt at first the method of associating a democratic élite which shall gradually grow larger.
VII. That along with measures for showing the people the reason, the direction, and the method of social effort, there be constantly employed measures of effective cooperation for the immediate application of the principles taught; that is, that theory be closely combined with practice.
VIII. That practical (cooperative, etc.) plans lend in turn material and moral support to the work of instruction, in order to give solidarity to the various social interests.

REPORT OF M. SIMIAND.
There is one other report on social education in France that demands attention from the point of view of this paper, viz, that of acquainting the reader with the extent to which the various educational systems of the world teach social science. This is the report of M. François Simiand, Agrégé de l'Université, on instruction in the social sciences in the primary schools. Sociologists usually regard their science as
quite beyond this grade, but the two reports we have already considered, especially the latter, show how broad is the conception in France of social science. In the report now to be considered we shall see that as we descend in the grades we must continue to broaden this conception. It here takes chiefly the two forms of moral instruction and civic instruction.

As regards the relation of ethics to sociology there is a strong disposition among leading social philosophers to look upon ethics as in a certain sense a department of the broader discipline called sociology. Auguste Comte, the true founder of sociology, did, it is true, in his Positive Polity, place morals above sociology in his completed hierarchy of the sciences, but the attentive reader of that work at once perceives that his morale is very difierent from the moral science of Paley, Whateley, and Wayland, and is a direct outgrowth of sociology. In fact its fundamental principle is sociability, and its aim is altruism. It has to do entirely with the relations of the ego to the alter. And when we reflect upon it we readily perceive that there would be very little left of morals if this relation were removed or even thought away. So that, whatever may be considered the relative rank of ethics or morals, it is essentially a social science.

While no question can arise as to the true social nature of civics as a branch of education, it might be supposed that this, too, was too complex and difficult for elementary instruction. We shall see in this report not merely what M. Simiand thinks of this question, but how it has been answered by the official framers of the French system; for in France the primary schools are established and maintained by the State. We shall therefore be dealing mainly with the organic laws of France on the subject of education, supplemented by the decrees emanating from the ministry of education, which not only prescribes the methods of instruction, but actually provides the curriculum. M. Simiand says:

The subjects of primary instruction are essentially determined by the text of the organic acts. What has this text to say touching the social sciences or social branches? Article 1 of the act of March 28, 1882 (on the obligatoriness and lay character of primary instruction), provides that "primary instruction shall embrace moral and civic instruction * * * some common notions of law (droit) and political economy."
Thus is defined and delimited by a fundamental legislative enactment the field of social instruction in the primary schools. From this as a basis the detailed application was established by special regulations (authorized by article 3 of the act of October 30,1886 ), which prescribe the distribution of the subjects among the different kinds of primary schools and among the different courses, and fix the order of studies and the time to be devoted to each.
The plan of studies now in force ${ }^{1}$ makes moral education one of the three sections of school work (the two others being physical education and intellectual education).

[^40]It is important to reproduce the exact language of the instructions which define the object of moral education.

Object and essential character of this department of education.-Moral instruction is designed to complete and combine, to elevate and ennoble all the subjects taught in the school. While the other studies develop each a special order of aptitudes and of useful knowledge, this one tends to develop in man the man himself-that is, his heart, his intellect, and his conscience.
Thus moral education moves in an entirely different sphere from the rest of education. The force of moral education depends less on the precision and the logical connection of the truths taught than on the intensity of sentiment, the vividness of impressions, and the transfusing warmth of convictions. Such instruction has not for its object to make men know, but to make them will; it moves rather than proves; acting upon sensitive beings, it proceeds rather from the heart than from the reason; it does not undertake to analyze all the reasons for the moral act; it seeks first of all to produce the act, to repeat it, to make it a habit that shall govern life. In the primary school especially it is not a science, it is an art of impelling the free will toward the good.
Role of the instructor in this brench of education. - The teacher is charged with this part of education at the same time as the others, as the representative of society. Lay and democratic society has, in fact, the most direct interest in having all its members early imbued by ineffaceable lessons with a sense of their worth and with a not less profound sense of their duty and their personal responsibility.
To attain this end the instructor does not need to teach a moral technique with all its apparatus, followed by a moral practice, as if he were dealing with children deprived of all previous notion of good and evil; for the immense majority come to him having already received and still receiving religious instruction which familiarizes them with the idea of a God, author of the universe and father of men, with traditions, beliefs, and practices of a Christian or Hebrew cult; by means of this cult and under the forms which are peculiar to it, they have already received fundamental notions of eternal and universal morality; but these notions with them are still in a nascent and fragile state; they have not penetrated deeply; they are fugitive and confused, rather half-perceived than really possessed; matters of memory rather than of consciousness, as yet scarcely exercised. They are waiting to be ripened and developed by a suitable culture. It is this culture that the public instructor is to give them.

His mission is thei well defined. It consists in strengthening these essential notions of morality common to all doctrines and necessary to all civilized men, in causing them to take root in the minds of pupils for their whole lives, and in making them pass into their daily conduct. He can fulfill this mission without having to display either adhesion or opposition to any of the various religious beliefs with which the pupils associate and combine the general principles of morality.
He takes these children just as they come to him, with their ideas and their language, with the family beliefs that they hold, and he has no other concern than to draw from them, whatever they contain, the most valuable from the social point of view, that is to say, the precepts of a high morality.

Proper object and limitations of this instruction.-Lay moral instruction is distinguished, then, from religious instruction, as all must admit. The teacher does not take the place of the priest nor of the father of the family. He joins his efforts with theirs to make of each child an honest man. He is to insist upon the duties that unite men and not upon the dogmas that divide them. All theological and philosophical discussion is manifestly interdicted by the very character of his duties, by the age of his pupils, by the relations of confidence sustained with families and with the State. He concentrates all his efforts upon a problem of a different nature,
but not less arduous, for the very reason that it is exclusively practical-the problem of apprenticing all these children to an effective moral life.

Later on, when they shall have become citizens, they will perhaps be separated by dogmatic opinions, but they will at least agree in the practice of making the aim of life as high as possible; of feeling the same horror of all that is low and vile, the same admiration for what is noble and generous, the same delicacy in the appreciation of duty; of aspiring to moral perfection, whatever it may cost; of feeling united in that general cult of the good, the beautiful, and the true, which is also a form, and one not the least pure, of the religious sentiment.

As to the programme that follows these general instructions, it prescribes:

1. In the infantile section ( 5 to 7 years), "very simple talks (causeries), mingled with all class exercises and recreations," the use of little poems learned by heart, stories told, and little songs.
2. In the elementary course ( 7 to 9 ), familiar conversations accompanied by readings and comments (recitals, precepts, parables, fables, and practical exercises); it is especially recommended to correct coarse notions (prejudices and superstitions, beliefs in sorcery and ghosts, etc.); to derive information from facts olserved by children, to proceed by the way of concrete examples and appeals to exparience: "To raise them, for example, to a sense of admiration for the universal order ani to the religious sentiment by bringing them to contemplate certain great facts in nature."
3. For the middle course ( 9 to 11 years), conversations, readings with explanations, and practical exercises, following the manner of instruction and the means recommended for the elementary course, but with more method and precision; the lessons and readings to be arranged so as not to omit any important point in a somewhat detailed programme, of which the following are the grand divisions:
I. The child in the family. Duties to parents and grand parents. Duties of brothers and sisters. Duties toward servants. The child in the school. The country.
II. Duties to self. The body (alcoholism). Property (economy, play, work). The soul (falsehood, modesty). Duties toward others (justice and charity, tolerance, alcoholism).
III. Duty to God. On this delicate point it is best to cite the whole text:

The teacher is not charged with giving a course ex professo on the nature and attributes of God; the instruction that he is to give to all without distinction is confined to two points:
First, he teaches them not to pronounce lightly the name of God; he associates narrowly in their minds a sentiment of respect and veneration with the idea of a first cause and perfect being; he habituates each of them to surround with the same respect the notion of God even when it is presented to him under different forms from those of his own religion.
Finally, and without occupying himself with special teachings for different religious sects, the teacher endeavors to make the child understand and feel that the first homage that he owes to divinity is obedience to the laws of God which his conscience and his reason reveal to him.
It is specified that "throughout this course the teacher shall take for his point of departure the existence of the conscience of the moral law and of obligation; he does not undertake to demonstrate them (duty and responsibility) by a theoretical exposition."
4. In the higher course ( 11 to 13 years), conversations, readings, and practical exercises as in the preceding courses, but, in addition, a regular series of lectures (leçons), a course in morals in general, and more especially in social ethics (morale sociale) according to a programme, of which the following are the salient points: (1) The family. (2) Society. Necessity and benefits of society. Justice, the condition of all society. Solidarity, fraternity. Alcoholism destroys little by little these
sentiments by destroying the basis (ressort) of the will and of personal responsibility. Applications and development of the idea of justice. Respect for life and human liberty, respect for property, respect for one's word, respect for opinions and beliefs. Applications and development of the idea of charity or of fraternity.
(3) Country. The text says:

What man owes to his country (obedience to the laws, military service, devotion, loyalty to the flag). Taxes (condemnation of all fraud toward the state). The vote (it is morally obligatory; it should be free, conscientious, disinterested, enlightened). Rights that correspond to these duties: Individual liberty, liberty of conscience, liberty of labor, liberty of association, guaranty of security of life and property for all. National sovereignty. Explanation of the republican device: Liberté, Egalité, Fraternité.

The official instructions make this recommendation:
In each of these chapters on the course of social ethics the pupil shall be told, without entering into metaphysical discussions:

1. The difference between duty and interest, even when they seem confused, i. e., the imperative and disinterested character of duty.
2. The distinction between written law and moral law. The one fixes a minimum of requirements which society imposes upon all its members under definite penalties; the other imposes upon everyone in the secret chambers of his conscience a duty which nothing compels him to perform, but which he can not fail to perform without feeling guilty toward himself and toward Cod.

Civic instruction is attached to the course of history and gengraphy, and placed at the end of the section of intellectual education. It is not mentioned in the programme of the infantile section. In the elementary course it includes "very familiar explanations, in connection with readings, of words calculateri to awaken a national idea, such as citizen, soldier, army, country, commune, canton, département, nation, law, justice, public power," etc.

For the middle course the programme prescribes:
Very summary notions on the organization of France.
The citizen, his obligations and his rights; school obligations, military service, taxation, universal suffrage.

The commune, the mayor, and the municipal council.
The département, the prefect, and the general council.
The state, the legislative power, the executive power, justice.
And for the higher course:
A deeper insight into the political, administrative, and judicial organization of France.

The constitution, the President of the Republic, the Senate, the Chamber of Deputies, the law; the central, departmental, and communal administration; the various authorities; civil and criminal justice; education, its various grades; public power, the army

There is no commentary specially indicating the object and spirit of this instruction.
Moral education and civic instruction, defined as above set forth, contain all of a social character in the curriculum of the elementary primary schools. Common law (droit usuel) and political economy, provided by the legislative text, have no place here. They are only found again in the programme of the higher primary schools.

As to the time to be given to the instruction in question, the plan of studies specifies that one lesson each day, taught in the way recommended, shall be devoted to moral instruction; that the teaching of history and geography, to which civic instruction is attached, shall occupy about one hour each day, but the share of civic instruction is not indicated.

Higher primary schools.-In the present ${ }^{1}$ plan of studies for the higher primary schools social instruction is represented by morals, civics, common law, and political economy.

Moral education.-Here the instructions say it is not a question of instruction, but of education.
The end to be pursued is to create and maintain in the pupils an ensemble of moral dispositions proper to prepare them for the life that awaits them in society.
The motives to be employed are of three kinds: Action upon the heart by appealing to the moral sense which a previous culture has developed in tliem; action upon the intellect by explanation and demonstration of the truths of the moral order; action upon the will by the practice of moral life according to their own experience and their individual character.

Having laid down these principles, the programme points out with some detail the three kinds of school exercises that correspond to these three modes of action. The "exercises tending to develop the moral sense are readings, recitals, and conversations adapted to bring forth and strengthen in the child the various sentiments that favor the development of the moral sense [examples], * * * and in a general way all the healthy emotions that predispose men to do right." The "exercises tending to instill into the mind the fundamental notions of morality" are concrete and living lessons, but methodical and conformable to a programme given with detail.

In the first year are to be treated the principles of ethics: (1) "The conscience, intuitive idea of duty, the power of man over himself;" (2) "society and its duties;" and in the third place, "return to self; such an application of the principles as to begin to make life understood by the adolescent mind." A few points in the detailed plan may be cited:
To cause to be observed the categorical differences which distinguish the condition of man, his rule of life, the constant and certain laws by which nature works in the moral world.
Different types of men: The idle, the industrions, the economical, the improvident, * * *; heroes * * *.

Egoism and disinterestedness; distinctive characteristics of moral obligation.
In proportion as the pupil shall have acquired a certain habit of personal reflection, he is to be brought to recognize that the individual is a small matter in himself, incomplete and dependent, that he forms part of a whole * * *; that he owes a debt to others, his fellow-beings, without whom he either would not be, or would not be what he is; whence the idea of society.
To insist upon the fundamental law of solidarity, the principle of all social organization.
Within society to distinguish two societies: The family and the nation; to insist upon what the individual owes to each of these.
For the second year there is indicated a series of lessons on "human life and its duties; man in society, in the family, in the nation." The order and mode of putting the questions, the nature and scope of the ideas suggested, seem sufficiently remarkable to justify the reproduction entire of this part of the programme:

1. Society.-What society is; man is not born to live alone; society necessary to his security and to the indefinite progress which is his law; it is his end and reason for being. Barbarous societies and civilized societies; traits that distinguish them; law is substituted for force; labor a common obligation; no more slaves and no more corporal punishment (supplices); the intellectual capital (fortune) of mankind daily guaranteed, as well as its transmission to posterity. Social solidarity in the economic world, in the scientific world, in the moral world. Natural inequality of aptitudes, inevitable diversity of functions.
[^41]Social jusice.-Respect for the person of man. in whatever rank he may be placed, and as a consequence of this imperative respect, slavery and seridom recognized as intolerable. Respect for the honor of others. Defamation and calumny. Respect for the products of labor; principle of property, its necessity; capital and labor; respect for contracts and for one's word. Respect for individual beliefs and opinions. Religious and philosophical liberty; tolerance.
Social fraternity.-Moral and social inadequacy of strict justice. Accidents of birth, physical and intellectual inequalities; accidents of education; accidents of life. Public instruction; public aid. Goodness; love of one's neighbor; devotion; disinterestedness.
2. The family and pricate man.-The family a special kind of society, but not exclusive in society; its function in the social order to which it is subject; its moral basis; its constitution, its members-solidarity that it implies ; respect for women the basis of the family in the modern world. Husband and wife; parents; children; their reciprocal duties. The spirit and virtues of the family. Private virtues; loyalty, labor, temperance, courage, frugality, charity (consequences of the vice of alcoholism from the point of view of the family and private life to be insisted upon). Social effects of private virtues.
3. The nation and comtry.-How our society is at the same time a nation; the idea of nation and country; its moral basis. Solidarity of generations; unity of direction. The mational spirit; defense of the country; the army; obligatory service; military discipline; courage.
4. The state and the luas.- What the state is; its origin; ite rôle; various forms of this authority; the republican form, its principle, and its superiority; proceeding from our consent and modified by our will, it can possess nothing arbitrary. National sovereignty; democracy (the élite in the democracy). Laws, their social and national foundation. Duties of the citizen; obedience to the laws; taxation; suffrage, etc. Repression, social legitimacy of penalties. Rights of citizens; individual liberty; freedom of conscience; freedom of worship within the limit of respect for law; freedom of labor; freedom of association. Public liberties. Dangers of arbitrary power; dangers of absence of government.
5. Nations among themselves; international duties and rights; international solidarity; humanity; love of humanity and its reconciliation with love of country. The jus gentium; aspiration toward a juridical ideal among nations; arbitration.

For the third year is prescribed a thorough revision of the principles of morals and a return to their principal applications; the articles drawn up recall much more closely the subjects known to classical courses (showing that our nature leads us to love the beautiful, to affirm the true, and to desire the good); conscience; liberty; personality; duty; moral ideal. The last paragraphs only will be quoted here:
To point out that it is in the nation that man fully realizes his nature, that he really becomes man-that is, a moral person-conscious of his duties and his rights; that the duty of the individual member of a nation is to cooperate willingly with the nation in human civilization.

The social ideal at different periods of humanity. To insist upon the traits charac. teristic of the true genius of France; explanation of the republican device "Liberty, equality, fraternity."

Sanctions of morality, internal sanction (moral satisfaction and remorse); natural sanction (consequences of our good or bad conduct for ourselves and for others as to the body and as to the soul); social sanction (public esteem or contempt); philosophical or religious sanctions (the idea of God). The teacher will take pains to speak of religious beliefs only with great respect and in such a manner as never to ruffle the minds of the children who are intrusted to him.

Finally there are indicated the third class of exercises, those tending to test the
conscience and form character (to study good or bad tendencies that appear in each pupil; to ascertain the practical morality of each one under the circumstances of daily life; appeals to sincerity; appeals to strength of will; transformation of effort into habit; development of delicacy of conscience).

The time assigned to this moral instruction is one hour per week during three years.
Civic instruction.-Civic instruction is here again attached to the course in history; it forms the end of the second year's course (which deals with France from 1789 to our time), and is engrafted upon the study of the third Republic and the constitutional laws of 1875.

Constitutional laus of 1875.-The two powers of the State, the legislative power, the executive power; the principle of the separation of the powers; the national sovereignty; preponderance of the Parliament; the legislative power; the Chamber of Deputies, its attributes, mode of its election, scrutin de liste and scrutin d'arrondissement; the Senate, its attributes and mode of its election; drafting and enactment of laws; the National Assembly, its attributes. The power of the executive, the President of the Republic; mode of his election; duration of his term of office, his powers; the government, the ministers, and the president of the council, manner of their appointment, ministerial responsibility, orders, decrees; the council of state.

The history course, of which these subjects are the last chapter, occupy one hour per week.

Common law und political economy.-The programme of common law embraces two parts, the one public law "detached from civic instruction," the chapters of which are called elements of judiciary organization; financial institutions; military organization. The second part is devoted to private law. It is arranged in the following order:
I. Persons.-Nationality, acts of the civil state; family right (marriage, parentage, ancestors and descendants, guardianship, coming of age, interdiction).
II. Rights of property. - Different kinds of property; right to real property (ownership, severalty, possession, usufruct, services); right to personal property or credit (facts that give rise to obligations, customary or legal means of assuring their execution), bonds, bail, license, mortgages, statutes of limitation.
III. Contracts.-Principle of freedom of contract; acts calculated to prove the same; proof by witnesses; capacity to contract; transmission of property; registration of written instruments; practical study of the most common contracts; sale; hire (rent of things, hire of labor or industry); loans at interest; usury; insurance.

II'. Transmission of property of a deceased person.-Successions deferred by law; inheritance by virtue of the expressed will of the deceased; right to alter the will.
The programme of political economy, while much resembling, in the selection and statement of the questions, the practice of our traditional courses, departs from it notably in the order and relative importance of the subjects. The following is the text:

Agents of production.-Nature, labor, capital.
Labor.-Intellectual labor, invention; manual labor; division of labor, advantages and inconveniences of the division of labor; machines, tools, their necessity.

Capital.-Its different forms; its divisions, fixed capital, circulating capital; industrial appliances; subsistence; union of capital and labor; its results.
Remuneration of capital and labor.-Intellectual labor; salaries; manual labor; wages; their several kinds; capital; interest; legitimacy of interest.
Profits and losses.-Their distribution; participation of laborers in profits.
Sale and exchange.-Value; price; causes that influence the variation of prices; money.

Internal trade and foreign trade.-Means of transportation; advantages of cheap transportation; exports and imports; exchange and its fluctuations. History of free trade, protection, and commercial treaties.

Credit.-Its advantages and disadvantages; the money of credit, bank notes; effects on business, notes of exchange, drafts, checks. The signature in business; importance of a signature; its consequences.

Agricultural industry.-Large and small culture; various forms of cultivating the soil; direct returns; farming; working land on shares.

Savings.-Savings banks and associations.
Insurance.-Its various forms.
Pension (superannuation) funds.
Mutual aid societies.
Cooperative socicties.-Societies for production and consumption.
Trade syndicates.-Summary of the law of March 21, 1884. Comparison with ancient (earlier) corporations.

Luxury.
Alcoholism.-Its effect on the porerty and misery of the individual and the family; its effect on public wealth; what alcoholism costs France; other effects-crime, suicide, loss of employment.

Population.-Emigration and colonization.
The State.-Principal attributes of the State; various kinds of taxes; the budget.
The time allotted for common right and political economy thus outlined is one hour per week in the third year.

In the higher primary girl's schools the moral programme is supplemented by some special observations on the rôle and the situation of young girls; that of common right is chiefly reduced to what concerns marriage and the life of woman, and that of political economy gives special attention to questions relating to working women.

After having thus fully presented the subject from the documentary standpoint, M. Simiand proceeds to make some rather extended comments, which need not be reproduced here in full. He enters into the question of the right of the State to give the moral instruction embraced in the above programmes, but as the State actualiy does prescribe this instruction, it is not worth while to discuss its right to do so, unless the object be to endeavor to bring about some modification of the system, which is only a matter for the French people themselves, and can not concern the citizens of other countries. M. Simiand proceeds with certain general criticisms of the existing system which he would reform, and he closes his report with the presentation of the following desiderata:

1. Social instruction, and especially moral, lay, and rational instruction, should either inspire a metaphysics of the State, liberally chosen, or else it should be exclusively positive, and therefore dynamic and critical, for all grades in the primary schools.
2. The arrangement of the programmes and their interpretation should be made for limited periods and within definite bounds; a special tribunal (committee, commission, etc.) should be instituted for this purpose.
3. Social instruction should be extended at the expense of the time and the importance assigned to history and also to geography.
4. It should embrace all the grades of the primary school (elementary and higher), social morality, civic instruction, ideas of right and political economy, which should be combined in a course of one method and one spirit.

What will probably most forcibly strike the outsider in this State curriculum of France is the amount of detailed instruction in subjects
that are usually elsewhere relegated to the higher (college, university) education, taken in connection with the extremely limited time allotted for such studies. Aside from the question whether children of such ages are capable of really learning anything of value about matters of this class, there is the more important question as to whether even persons of mature minds would acquire enough in the time to be of any real value. The interesting thing is the evidence it affords that the French mind is thoroughly imbued with the importance of social instruction. When that nation shall become wiser it will probably transfer most of this to the secondary schools, and in an expanded form to the university and the faculties of law, letters, and sciences, all of which, as M. Gide's report clearly shows, are still largely dominated by the old scholastic method and spirit.

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REPORT OF M. DEHERME.
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The report of M. G. Deherme, ostensibly on social instruction in France, is really for the most part conined to giving an account of a local organization in Paris called the Cooperation of Ideas, which has much the character of the English University-extension movement, and is in itself an interesting institution, but somewhat too special and restricted in its scope to call for detailed exposition here.

REPORT OF M. BERNES.
Prof. Marcel Bernès, in his extended report on the "Teaching of social ethics in the secondary schools of France," has fully set forth the moral aspect of French education. M. Bernès, formerly of the University of Montpellier, now professor of philosophy at the Lycée Louis le Grand, is a well-known author of ethical and sociological works, very scholarly, with a delicate and somewhat obscure style. His report was discussed at the congress, and is worthy of serious consideration, but enters more deeply into this special aspect of social education than it is possible to do in this paper, especially in view of the full treatment of social morals contained in the report of M. Simiand.

## Belgium.

Next to France it is perhaps in Belgium that the recent social awakening has been most marked among nations, and there also this sentiment has made its impress upon the educational system of the country. Three important reports on social education in Belgium were presented to the congress, and in each case the author was present to expound his views and respond to inquiries. Two of these deal specially with the international aspect of the subject, and only one, that of M. Mahaim, aims to present the history and present aspect of the movement in Belgium. We will therefore consider this first. As
in previous cases, too, we shall find it the most satisfactory way to allow the author for the most part to speak for himself.

REPORT OF M. ERNEST MAHAIM.

Political economy was for a long time alone in representing the group of sciences of society in the higher education of Belgium. It is true that Belgium can claim the honor of giving it asylum in its universities, even in advance of France. It has figured in the programme of the faculties of law in the two State universities (Ghent and Liège) since 1830. The independent universities (Brussels and Louvain) also registered it among the number of their courses in the faculty of law at their foundation in 1834.

We find it also in 1836 under the name, remarkable for the time, of social economy (later, industrial economy) among the courses of the School of Mines, Arts, and Manufactures annexed to the faculty of sciences of the University of Liège. The Superior Institute of Commerce, of Antwerp; the School of Mines, of Mons; the polytechnic schools attached to the universities of Brussels and Lourain, have had an analogous course, always elementary, since their foundation.
There was, indeed, also a "doctorate in political and administrative sciences," at first "legal," then purely rcientific, but outside of political economy it embraced only juridical subjects.
The course in political economy not only did not have any great development, but it was classed in the category of courses for certificate, i. e., of those which it sufficed to study much or little. It formed no part of the examination. The law of May 20, 1876, suppressed these courses and inscribed political economy among the numler of obligatory subjects for the doctorate in law.
The inadequacy of political instruction was early pointed out, among others by the rector of the University of Liège, M. Trasenster, who devoted to it his opening address in 1884. In 1888 M. Van der Rest, then rector of the independent University of Brussels, asked for the creation of a school of social sciences. If it is necessary to name, avide from demands and projects, ${ }^{1}$ the first adrances in the teaching of social science, I think the honor belongs to M. Victor Brants, who inaugurated, in 1885, alongside of his obligatory course in the faculty of law (Catholic University of Louvain) a practical (optional) course, in which the method of the German semmar was applied, as also an optional course in social science in its relations with the labor question. ${ }^{2}$
The law of April 10, 1890, on the coordination of academic grades, which modified the schedules of courses by modifying the subjects for examination in law, did not at all change the teaching of social sciences in the State universities, but from that time the reform was considered urgent.
It was the independent universities that set the example. In 1891 the Université libre de Bruxelles opened its school of social sciences, ${ }^{3}$ and in 1892 the Catholic University of Louvain its school of political sciences, the principle of which had been approved by the Catholic assembly held at Malines in 1891, upon an excellent report by M. Van den Heurel.

A royal decree of October 2, 1893, accomplished the looked-for reform in the higher official instruction. The old doctorate in political and administrative sciences

[^42]was suppressed and replaced by three specialized licentiates and doctorates, the number of the courses and professors being considerably increased.

Since that time the independent universities have successively modified and enlarged the scope of their instruction, to bring it into harmony with that of the State universities. The creation, in 1894, of the Universite Nouvelle de Bruxelles, with its Institut des Hautes Études, introduced a new element of competition. So that to-day Belgium possesses, outside of its technical schools and higher business institutions, five superior schools for instruction in the social sciences.

## STATE UNIVERSITIES (GHENT AND LIĖGE).

The special teaching of the social sciences in the State universities has not been modified since 1893, except in matters of detail. It furnished at that time to the free universities examples which they hastened to imitate, but since that time it has not perhaps known how to profit in its turn by the successive improvements introduced by the free universities.

It is attached to the faculty of law without forming in it a distinct and independent school.

It embraces three licentiates and doctorates: In administrative science, in political science, in social science.

The first is designed for young persons who wish to prepare themselves for an administrative career; the second is organized rather with a view to a diplomatic career, and the third has for its object chiefly to give to those who do not have as their objective point a professional diploma a complete political and social education.

The examination for the licentiate in each of the three categories embraces obligatory courses and also two courses freely chosen by the candidate in the programme of the faculty of law (thus including that for the other licentiates) or of the faculty of philosophy. In practice most of the students choose as their optional courses those for the other licentiates.

The obligatory courses for the licentiate in administrative sciences are:

1. Administrative law (provincial and communal institutions of the principal States and special subjects), three hours during one semester.
2. Parliamentary and legislative history of Belgium, two hours, one semester.
3. Financial science, one hour the whole year.
4. Statistics, two hours one semester and one hour the other semester.
5. Practical exercises in political economy, two hours, one semester.

The obligatory courses for the licentiate in political science are:

1. Comparative constitutional law, three hours, one semester.
2. The law of nations (special topics), three hours, one semester.
3. Colonial economy and legislation, two hours, one semester.
4. Diplomatic history of Europe since the congress of Vienna, one hour and a half the whole year.

The obligatory courses for the licentiate in social science embrace, besides finance and the practical exercises in political economy that we have already enumerated:

1. The position of labor in comparative legislation, one hour the whole year.
2. Economic history (special topics), two hours, one semester.
3. Comparative civil institutions, one hour and a half, one semester.
4. Special subjects in political economy, one hour the whole year.

In each section it is sought to make the largest possible use of the inductive method, especially in history and all the important courses; political economy, science of finance, statistics, law of nations, are accompanied by practical courses in which the students must produce personal researches.

A licentiate in commercial and consular science, created in 1897, and which has just been reorganized, has come to furnish the students in social science a new elective
conare to choose from: Industrial geography, transportation and commercial appliances, moritime law, articles of trade, ete.

The three licentiates are avalable without conditions to doctors of law, who may obtain their diphomas in them after one year's study. Voung persons who are the holders of an academic degree by asking for one year's study should pass the examination for candidate in political seience, which requires one year of preparation. For young persons who have not taken any mivemity smblies at all the candidacy in political seience requires two years and involves two examinations.

This candidacy embraces sulbects in philosophy and history as weh as elementary juridical subjects.

The doctorate which crowns each of the three licentiates is obtained by the preparation of a disvertation, which need not be printed, but which must be publiely defended, with five other subjects, choen by the candidate from among the quegtiens in the examination.

The nomber of students who attend the coures for the licentiates is not large; it has never amomated to ten at Liege and usually varies hetween fon and eight. I think it has been still less at (xhent. These diphomas, fo which no material advantage is attached, only attract an élite of young workers. ${ }^{1}$ The majority is made up of toctors of law, those who concent to postpone for one year their actual admission to the bar. The licentiates are not organized as at Brossels, to be songht hy students who are pursumg at the same time their regular studies.

But if the number of sturlents is limited, their work is often to be praised. The University of Liege has thas far given only one diploma of doctor of social seience, and this after a dissertation of the first order as the reent of a sojomen aboad.

## Liviversile Libre de Brmielles.

The Eeole des Sciences Politiques et Sociales of the Universite Libre de Braxelles embraces at the present time $t w o$ sections:
A. The section of political seiences, which inchades:

1. Comparative parliamentary and legishative history, one hour per week the whole year.
2. Diplomatic history of Europe, one hour, one femester.
3. The law of nations, two hours, one semester.
4. Comparative constitutional law, two hours the whole year.
5. Civil institutions, two hours, one semester.
6. Seience of finance, two hours, one semester.
7. Statisties, two hours, one somester.
s. Political cconomy (special topics), two hours the whole year.
8. Colonization and eolonial policy, two hours, one semester.
B. The section of economic sciences:
9. History of economir doctrines, two hours, one semester.
10. Feonomic history, one hour, one semester.
11. Economic geography, one hour, one semester.
12. Labor legislation, two hours, one semester; atso political economy (special topics), statistics, science of finance, colonization and colonial policy, which are common to the two sections.

The regulations provide for the creation of a third section, that of the social sciences, which would embrace especially the following courses: (ieneral sociology, including the methodology of the social sciences; history of sociological toctrines, particularly in the nineteenth century; statistics and its general application; calculus of probabilities; comparative geography; biology in its relation to the social sciences;

[^43]anthropology and ethnology; psychology; psychology of peoples; comparative history of religions; comparative history of language; comparative history of art.

There are being given besides, from now on, three optional courses: Considerations on biology in its relation to the social sciences, one hour, one semester; general principles of religious evolution, one hour, one semester; and general political right, one hour throughout the year.

The examinations lead to the degrees of licentiate and of doctor in political science, of licentiate and doctor in economic science. The licentiate and doctor in social science have not yet been established.

The degree of licentiate is obtained by an examination bearing on all the obligatory subjects of the corresponding section, but the candidate may divide the subjects of the examination into two or three sittings, as he prefers, or pass the examination at one sitting.

The conditions of admission to the examination are very broad. It is sufficient1. To have been enrolled during two years as a student of the school.
2. To evince the necessary acquaintance with five branches of study in a scheme of twenty branches drawn up in the regulations, and which include precisely the elementary subjects for candidacy in philosophy and in science. It is enough, in short, to have taken one year in any university studies in order to obtain admission to the examination of the school.

Further, it is necessary to remark that if the examination is taken at more than one time the two conditions cited above are only necessary for admission to the final test, so that, for example, a student in law or in engineering could present one or two proofs of the examination for licentiate without combining the condition relative to the five branches. This latter would only be required for the final sitting.

The object of these arrangements is evident. It is that of permitting students to avail themselves of the studies of the school and those of the faculty to which they belong without prolonging their stay at the university. This, of course, does not prevent students who have the time to devote to these studies from prolonging them beyond their professional studies.

The degree of doctor is obtained by presenting a thesis, in manuscript or printed, which must be publicly defended along with five special points selected by the candidate from the schedule of subjects of his section.
Aside from regular students the school admits outside listeners, who may, for a small fee, follow one or several courses.

The Brussels school, thanks, among other things, to the ingenious elasticity of its conditions of admission, has attained a considerable success, considering the general conditions of university study in Belgium. Certain courses have a numerous following. Two or three diplomas of doctor have been conferred for remarkable dissertations. "A seminar in political economy," the papers of which are published in the Revue de l'Université, was opened this year. Twenty students have registered for it.

> Caiholic Cniversity of Lourain.

The School of Political and Social Sciences of the Catholic University of Louvain carries on its programme in 1900 the following courses:

1. Belgian public law (special subjects), one lecture per week throughout the year.
2. Political and social economy (special subjects), one lecture per week throughout the year.
3. Comparative public law, one two-hour lecture.
4. Comparative private law, one lecture per week.
5. Science of finance, one lecture per week.
6. International and colonial law, one lecture per week.
7. Diplomatic history and commercial policy, one lecture per week.
8. Commercial law (comparative commercial legislation), one lecture per week.
9. Statistics, one lecture during one semester.

The special subjects of these courses change every year, so as to form a complete cycle every two years.

Besides these three practical courses, there are announced: That of social economy, that of public law and political science, and that of international and colonial policy.

From the present year a foreign savant of renown is to come and deliver lectures on a current question. M. Georges Blondel, professor in the University of Paris, opens the series by some lectures on the political and economic transformation of Germany in the nineteenth century.
The school confers the degrees of licentiate and doctor in political and social science, and those of licentiate and doctor in political and diplomatic sciences.
To be admitted to the licentiate it is necessary (1) to be a doctor in law or candidate in political science; (2) to have followed for two years at least the courses of the school.
The candidacy in political science, which opens the door to the school, is only accessible to young persons having obtained an academic degree requiring at least one year's study; or having undergone a preparatory examination embracing the subjects of philosoplyy and history. The candidacy itself consists in an examination on various elements of law and political economy.
In order to obtain one of the degrees of licentiate it is necessary to undergo an examination bearing on at least nine of the branches indicated in the programme, but the student has, within certain limits, the choice of these branches. As he is necessarily to remain two years at the school, he may double the subjects of examination for either category.
Each licentiate is completed by a doctorate, which consists in the presentation of a printed dissertation, and in the oral defense of the same.
The school of Louvain has attained a great success, which is increasing, forty-nine students, of which forty-seven regular, were enrolled in 1898-99. This is certainly due in great part to the talent and prestige of its professors, but also to the character of the population. The University of Louvain attracts from all parts of Belgium the sons of all the rich Catholic families. It is less difficult to find among them an élite of young men disposed to pass two years--the most of the time after four or five other years in law-in pursuing studies which do not lead to a professional diploma. It is also possible for them, in order to obtain the doctor's degree, to prepare a printed thesis and to make a trip abroad for several months. In October, 1899, thirteen theses had been published, some of which were of real scientific value; the school had conferred eight diplomas of doctor of political and social science, one of doctor of diplomatic and consular science, and five of licentiate in political and social science.
It must be added that, like the German seminars, the school has for two years possessed a special library formed by gits and by an annual fee from the students. This is a valuable auxiliary to the practical courses, which is thus far wanting in the State universities.

## Crixersité Nourelle de Bruxelles.

The Université Nouvelle de Bruxelles, which came into the world in 1894 with so much noise, and whose sponsors so sharply lectured the "old universities," independent or official, ${ }^{1}$ presents in its programme an extremely rich collection of courses in political and social science.
The faculty of law gives a diploma of doctor in political and administrative sciences, the subjects of which correspond nearly to those of the doctorate in political science of the State universities. A thesis is required.

[^44]But the new university possesses also a faculty of social science, in which, according to the programme, twenty-five courses are taught by forty professors. Certain courses have as many as seven instructors.

The programme does not indicate the hours devoted to the courses; we do not therefore know their length. They are given, it is true, at the Institut des Hautes Études, an international school where leamed foreigners of great renown in very different sciences come and deliver courses of lectures. It is an original and rery happy experiment which has succeeded admirably, and one which the University of Louvain has recently imitated.

The doctorate in science includes (1) four semesters of study; (2) one or two examinations, within the choice of the students, on the following branches: Geography, general biology, general psychology, demography, comparative statistics, social economy and history of social economy, history of philosophy, history and philosophy of law, criminal sociology, history of political doctrines, general sociology and methodology, general philosophy of the sciences; (3) presentation and defense of a thesis. "Seminars are annexed to the faculty for the preparation of theses and of special papers under the direction of the professors."

It is not for me to express a general appreciation of the higher instruction in the social sciences in Belgium, still less to compare the various schools with one another. I can not, however, refrain from pointing out two of the happiest features common to them all. First, the abandomment of unchangeable schedules. These still prevail in the faculties of law, but in the sections of the social sciences the student has everywhere, within certain limits, the liberty to choose his subjects and to specialize. Then, the introduction of practical courses in which the student must apply himself to personal researches. More air and more light have penetrated the ancient forests of the higher studies. There is only one other hope to express, and that is that the breath of progress which is sweeping by may also reach the regular professional studies and thus permit a larger number of young men to enter upon the new paths that are being opened to them.

So far as the higher education is concerned this brief but lucid report of M. Mahaim seems to leave nothing to be desired, and for this reason I have introduced it entire. American educators will surely read it with interest. They can make their own comments, and can not fail to compare the system of social instruction in America with that of Belgium. Sociologists had heard much of the Université Nouvelle de Bruxelles, with its eminent rector, Dr. Guillaume de Greef, whose numerous able works on various aspects of social science are so widely known. It was under his inspiration that the new enterprise was launched in 1894, and in certain of his works ${ }^{1}$ he has given the keynote of the policy which that institution has adopted. It was, as M. Mahaim has intimated, a sort of revolt against the conservatism of the other universities, and since its foundation it has done much to stimulate them to action.

## REPORT OF M. WAXWEILER.

The report of M. Emile Waxweiler, of the Université Libre de Bruxelles, while referring to that of M. Mahaim for the principal data, adds some further details and then proceeds to discuss at considerable

[^45]length the desiderata and needed reforms in the Belgian system of social instruction. It is chiefly a plea for the special organization of this department and concludes with the following words:

To sum up, in whatever way we consider it, if it is desired to make instruction in the social sciences what should be expected of it, it must be made accessible to the largest possible number of students, it must be diversified and adapted to multiple ends; in one word, it must be given a special organization.

The report of Senator H. La Fontaine on the "Adoption of an international system of social instruction in Belgitum" discusses the two questions, (1) what such a system should teach; and (2), how best to teach it. In answer to the first of these questions he quotes the wellknown line of Terence, "Nihil humani a me alienum puto," and argues for a broad presentation of all aspects of humanity, laying special stress on the study in the interest of universal peace, of the social life of remote peoples, such as the Chinese. In answer to the second question he concludes that the best way is some sort of interchange of lecturers in the universities where social science is cultivated, so that the points of view of eminent foreigners may be presented and a broad conception formed by students of all social questions. His chief illustration is the Université Nouvelle de Bruxelles, in which, as we have already seen, this is made a special feature. He appends to his report a list of the foreign lecturers who have been charged with courses at that institution since its foundation, in 1884, with the subjects treated. The countries thus far represented have been: France, Italy, Germany, Russia, and the United States, and the number of lecturers is twentyseven. Among the latter we note: Elisée Rechus (history of geography), Roberty (ethics), Ferri (criminal sociology), Kovalevsky (the economic régime, aristocratic régime, history of labor, history of political doctrines), Gumplowicz (German sociological literature), Seignobos (contemporary history, political parties in France).

## Sivitzerland.

From Switzerland, the country in which political socialization has advanced furthest, there were four reports, those, namely, of MM. Suter, Renard, Vittoz, and Combothecra. Of these the first two were publicly defended by their authors at the congress and fully discussed. REPORT OF M. SUTER.
M. Suter's report is historical and descriptive. -Its title is:
"Present state of instruction in the social sciences in Switzerland: Universities, high schools, special schools."

The following is the substance of the report:
There are in Switzerland five complete universities, which, in the order of their age, are as follows: Basel, Zürich, Bern, Geneva, Lausanne. Besides these, Friburg possesses a Catholic university which lacks the faculty of medicine, and also lacks scientific freedom, since its instruction is placed under the Dominicans.

Finally, the Academy of Neuchâtel is composed of four faculties: Faculty of letters, of science, of law, and of Protestant theology.

Of special schools, there is the Federal Polytechnic School at Zürich, which includes, along with schools of architects, of engineers, of chemistry, of agriculture, etc., a general section of philosophy and political economy.

In none of these institutions of higher education does instruction in the social sciences occupy a very large place, and nowhere except at the University of Geneva. is it concentrated in a special faculty.
There is no cause for special wonder at this state of things. The title to be called a science even of our knowledge of the organization and conditions of development of human societies is still disputed, notwithstanding the importance and constantly increasing number of works on sociology. Thus we read in the Petit Dictionnaire politique et social, published in 1896 by M. Maurice Block, member of the Institate of France, article Sociology: "Does there exist a social science? We may answer squarely, no." Without discussing such assertions one may conclude from them that the social sciences have not yet emerged from the groping period, for no one would think of disputing the scientinc character of mathematics, for example, or chemistry or physics. Social science being still relatively so young; the teaching of it can scarcely have attained a great extension, and no more in Switzerland than elsewhere.
I shall rapidly pass in review the courses which, in the programmes of the eight higher educational institutions of Switzerland, may in strictness be regarded as constituting an instruction in the social sciences, and to this end I shall examine successively the spirit, the matter, and, finally, the distribution of this instruction.

## SPIRIT OF THE INSTRCCTION.

The universities located in Switzerland are all cantonal institutions and are under the exclusive control of the cantonal authorities. The federal legislation has completely respected the autonomy of the cantons in the matter of public instruction. No general law or regulation, therefore, controls these universities. Therefore a great diversity can and does in fact reign in the organization, distribution, and tendencies of the higher education.
One feature, however, is common to all our universities except that of Freiburg. This is the complete independence of instruction as regards the state or any authority whatever. There does not exist in them any trace of official doctrine, and even in the choice of the persons teaching the cantonal governments allow themselves in general to be guided by the interests of science and of education, at least so far as the limited appropriations at their disposal permit.

Cantonal governments, accused by the economists of socialistic tendencies for having introduced the progressive income tax and tax on inheritance, free school apparatus, compulsory state fire insurance, etc., have called to the chairs of political economy of their universities pure individualists, convinced opponents of all state intervention in the domain of economics. Such are Professor Pareto, at Lausanne, and Professor Pantaleoni, at Geneva.

On the other hand, governments not at all suspected of socialism have appointed professors who proclaim themseives Marxist socialists, such as Professor Reichesberg, at Bern.

At each of our universities, along with the ordinary professor of political economy belonging, either as at Lausanne and Geneva, to the liberal school of economists of Adam Smith and Jean Baptiste Say, or, as at Basel and Zürich, to the school of social politics often called state socialism, there is generally an extraordinary professor, or agrégé (privat-docent), teaching the most advanced doctrines by means of special courses in sociology, history of economic systems, etc.

This great freedom, coming out of this diversity in the exposition of theories and ideas on human societies, seems to present, if not a guaranty, at least favorable conditions for a healthy development of this branch of education.

If a more or less exclusive and uniform tendency happens to prevail in this class of teaching, the search for truth incurs the risk of taking a false course in the interest of a social class or of a dominant political party. In Switzerland students desirous of forming an opinion for themselves have in general an opportunity to hear more than one side. If they know how to profit by it so as not to let themselves be drawn into a narrow rut it is a great gain.

Another circumstance that must act farorably on the spirit of social education in Switzerland seems to me to be this: In an old democracy like Switzerland, where everyone is interested in public affairs, where every citizen is often called upon to rote, and consequently to form an opinion on laws of great social importance, professors and students in the higher institutions are naturally inclined to take a special interest in the social side of every science that relates to man.

We feel keenly the truth so well formulated by M. Fouillée in the preface to his last remarkable work:' "The further we go, the more every science becomes inseparably practical and theoretical, until it can no longer disconnect itself from its social and economic applications. The moral sciences in particular are growing more and more socialized."
This is why we can perceive, especially in the universities of Berm, Zürich, and Geneva, the tendency to conceive and treat in a social spirit all the sciences that lend themselves to it, such as law, philosophy, morals, pedagogy, hygiene, history, etc., thus unconsciously following the example given by another great French philosopher, in applying this method to esthetics, morals, and religion in his works: L'art au point de rue sociologique, Essais d'une morale sans obligation, and Irreligion de l'avenir (M. Guyau).

THE MATTER OF SOCIAL EDUCATION.
In all the higher educational institutions of Switzerland there are courses in political economy, theoretical and applied.

All these schoois, except Lausanne and Neuchâtel, have also a special course in the science of finance.
The universities of Geneva and Bern only offer a course in sociology, properly so called.

At Creneva this course is given by Professor Tuarin, the economist, well known, among other works, by his collaboration of the Revue d' Économie politique, directed by M. Gide.

At Bern the course in sociology is given by Dr. Ludwig Stein, professor of philosophy. Besides philosophic studies, M. Stein has written a large work: Die sociale Frage im Lichte der Philosophie, which one only need glance through to gain an idea of the boldly reformatory, but always evolutionary, spirit of his sociological teachings.

While rejecting for future society the collectivism which seems to him too sudden a leap to find a place in the evolution of humanity, he seeks a synthesis between equality and liberty, and believes it possible to attain it by means of the socialization of rights, the monopolizing by the state of all the new productive forces (products of the mines [sous-sol], water power, etc.) and by a system of production based in part on private property strongly controlled, in part on collective property, the whole destined to end in a higher type of the individual and of humanity.
The principal science auxiliary to the social sciences, statistics, which is rather a scientific method than a science, is also taught in most of our universities.

Aside from these subjects, which might be called the social sciences par excellence, there are other disciplines which only belong to the social domain in certain of their phases and which may be classed as instruction in the social sciences or not, according as the professor charged with teaching them emphasizes or neglects these social
phases. This is the case with law, philosophy, history, somewhat so with geography, anthropology, psychology, hygiene, pedagogy.

As regards law, the following courses certainly contribute in part to education in the social sciences: At Bern, philosophy of right, by M. Stein; at Zurich, general theory of right, by M. Freichler. And probably also the following courses: At Freiburg, natural right, by M. Jaccoud (in French) ; at Freiburg, natural right, by M. Lampert (in German) ; at Lausanne, encyclopedia of law, by M. Raguin; at Neuchatel, encyclopedia of law, by M. $\cdot$ Meckenstock.
Finally, the great legislative task of the unification of civil law and penal law throughout the whole extent of the Confederation imposes upon the teaching of law in Switzerland the comparative study of the difierent cantonal laws and of those of the countries that surround us, with a constant care for the creation of a new code which shall be a synthesis of, or a compromise between, the existing daws, and, if possible, an improvement upon them all. It is evident that under these circumstances the social point of view must play a large rôle in the present teaching of law in Switzerland. The drawing up of preliminary projects for the federal, civil, and penal code has, moreover, been intrusted to the professors of our universities. II. Eugène Huber, professor at Bern, is the author of a boldly innovating draft of a civil code for Switzerland, especially as regards, among other things, the rights of women, the right of succession (inheritance), the law of mortgages; and all the reforms proposed aim at greater justice and less social inequality. We may therefore be sure that the courses that M. Huber gives at the University of Bern on the law of obligations, history of Swiss law, and legislative policy, do not neglect the social point of view.
It is the same with the teaching of history. The subjects and the historic periods treated by preference indicate the predominance of social considerations with the professors charged with these courses. I cite at random: Social and agrarian struggles of the Roman Republic; history of the Reformation and the French Revolution; the French Revolution of 1830 and 1848; contemporary history from 1870 to 1880; history of civilization; history of civilization in Switzerland; history of democratic ideas; history of public instruction in Switzerland; Cuba, Porto Rico, the Philip-pines-the end of a colonial empire; the English in South Africa; the United States, the country, customs (mœurs), civilization, etc.

As to philosophy, it is less easy to discover in the university programmes indications that philosophic teaching occupies itself with social science. It seems rather to take the direction of logic and the history of philosophic and metaphysical systems.

## DISTRIBUTION OF SOCIAL INSTRUCTION.

Most of the Swiss universities have still preserved their old framework of the traditional faculties and fit into it in some sort of way whatever they do in the matter of teaching the social sciences. Nevertheless, the University of Zurich, while still classing its professors in the four following faculties-A, theological faculty; B, faculty of sciences of the state (instead of faculty of law); C, faculty of medicine, and D, faculty of philosophy, divided into a section of philosophy, philology, and history, and a section of natural sciences and mathematics-has adopted for its programmes of courses a new classification by sciences. This classification is justified by the fact that there is a special degree of doctor for each of the divisions. The following is the list: Theological sciences; juridical and political sciences ("Rechts und Staatswissenschaften" ); medical sciences; philosophy and pedagogy; philology, archaeology, and history of literature; history and its auxiliary sciences; history of civilization and of art; mathematics and natural sciences. One step more has been taken by the University of Geneva to render homage to the social sciences. They have instituted there a faculty of letters and social sciences, and as sanctions, a licentiate in social science and a doctorate in sociology.

The programme of this faculty for the summer semester of 1900 is composed in fact of social sciences, as follows:
M. Matteo Pantaleoni, professor ordinary: Political economy, theory of international trade and the practical questions belonging thereto, four hours; statistics, demography, two hours; economic lectures' (pure political economy is reserved for the winter semester), two hours.
M. Louis Vuarin, professor ordinary: Political systems, the Middle Ages, two hours; social economy, free and compulsory insurance, the educative character of the state, guiding principles in social economy, two hours; sociological lectures, preparatory to the licentiate in social sciences, two hours.
M. Paul Duproix, professor ordinary: Pedagogy, comparative psychology of the man and the child, two hours; the science of education in the nineteenth century, one hour; methodology, one hour; pedagogic lectures, one hour.
M. Eugène de Girard, professor extraordinary: Social systems, one hour; lectures on economic history, one hour.

COURSES OF PRIVAT-DOCENTS.
M. Winiarsky, doctor of letters: Social economy, the economic bases of social science, historic societies, one hour; pure political economy, mathematical theory of exchange, production, capitalization, and money, one hour.

In the division of the juridical and social sciences of the University of Zurich the chair of political economy is occupied by M. Herkner, who also gives the course on the science of finance. M. Herkner is a moderate socialist, and has written a work on the labor question which is still quoted as one of the best on the subject (for example, by M. Werner Sombart, professor at Breslau, in his work on socialism).
M. Goldstein, privat-docent, gives a course there on the labor question: Protective legislation for the workingman. Also a course on agrarian, commercial, and social policy. In a seminar of political sciences the same professors treat the subjects of their courses in a more thorough manner.

The only truly ancient university in Switzerland, the venerable high school of Basel, founded in 1460 , reorganized in 1818, has preserved, without changing anything in them, the four traditional faculties of the German universities: Faculties of theology, of law, of medicine, and of philosophy, the last divided into a philologicohistorical section and a section of natural sciences and mathematics.

The faculty of law embraces only purely juridical courses, except one course by Professor Speiser, director of the finances of the Canton, on fiscal legislation.

The only chair of social science is relegated to the faculty of philosophy, and is occupied by Prof. Ph. Korak. His collaboration on the modest Swiss economic review-Les Feuilles Suisses pour la Poilique Économique-the organ of the professors of political economy of Zurich, Basel, and Bern, edited by Professor Reichesberg at Bern, proves that the Basel professor adheres more or less to the so-called state sociaiism, or socialism of the chair. But nothing in the sober schedule of his courses indicates it. The following is its contents:
(1) General political economy, four hours per week; (2) science of finance, two hours per week; (3) history of doctrines and of economic literature since Adam Smith, two hours per week; (4) important questions concerning the economic movement, one hour per week; (5) at the seminar of social economy: Practical exercises, excursions, etc.

At the University of Bern the arrangement of the teaching of the social sciences is different. The division into faculties is the same as at Basel, but the social sciences, except sociology and the philosophy of law, are attached to the faculty of law. They are not out of place there, because almost all instruction in law at Bern is strongly penetrated with the social spirit-that is, with progressive and reformatory tendencies.

I have already mentioned Professor Huber, author of an advance draft of a federal civil code. The predecessor of the present professor of penal law, Professor Stooss, now at Vienna, drew up a plan for a federal penal code, likewise in an innovating spirit. The present incumbent, M. Gretener, who has also just accepted a call from a great university in Germany, made in his last course on penal law an exposé and criticism of the Italian positive criminalist school, the essentially sociological school of Lombroso and Ferri.

Prof. A. Reichel, who gives a course on federal law relative to failures (faillites) and a course on Bernese civil procedure, is a militant socialist, but the somewhat dry matter of his courses scarcely lends itself to incursions into the domain of social doctrines.

Professor Hilty, who teaches federal public law and the law of nations, is a distinguished writer, historian, and moralist. He does not cease to preach the return to the simplicity and virility of the ancient Swiss, and misses no chance to show that a sound democracy can not coexist with luxury and a plethora of wealth at the top of the social scale and the undeserved poverty of the wage earner at the bottom.

Professor de Salis expounds, in his course on the history of federal public law, the parallel development of federal administrative law and of the social organization of the Swiss people.

The following are the courses of social science properly so called:
M. Oncken, professor ordinary (partisan of economic liberalism tempered by moderate state intervention), gives three courses: (1) Theoretical and practical political economy; (2) fundamental questions of commercial policy; (3) summary of recent economic literature.
M. Reichesberg, professor extraordinary (advanced socialist), has three courses: (1) Industrial and commercial policy; (2) introduction to administrative statistics; (3) current questions of social policy.

Courses by privat-docents.-Dr. Schmidt, fundamental questions of economic policy; general statistics. Dr. Geiser, history of Bernese law; real property, communal right, and laws relating to public aid.

Summaries of the juridical and economic literature of Switzerland.
At the University of Freiburg, the course in political economy is given in French by M. Jaccoud; in German by MM. Ruhland and Beichel, who also give courses in political arithmetic and insurance and in agrarian policy. All these courses are embraced in the faculty of law.
At the University of Lausanne, Professor Pareto's course in political economy figures in the programme, both in the faculty of law and in the faculty of letters. There was, seven or eight years ago, a project for organizing a systematic course of social instruction. A series of lectures on this subject took place among the professors of the faculty of letters and the facuity of law. This project did not succeed. M. Georges Renard's course on French literature is given especially from the socio= logical point of view.

At the Academy of Neuchattel the courses of M. Junod in political economy form part of the faculty of letters. The schedule of the courses indicates a principal course in political economy, and other courses in production and distribution of wealth, agrarian and labor questions, and two courses of one hour each on the history of economic doctrines and on demography.

Finally, the Federal Polytechnic School at Zurich has a section of general philoso* phy and political economy, composed of two optional courses, in which the subject is divided up in the following manner:
A. Course in mathematics, natural history, and technique, completing in part the programme of the professional schools. We here find among others the following courges: Anthropogeography; problems of heredity in man; development of man; general hygiene.
B. Philosophic and economic courses: .(1) Literature and language: Courses on language and the history of literature and civilization, German, French, Italian, English, Russian. (2) Historical and political sciences: This division embraces courses on political economy, finance, and practical industrial economy, given by MI. Charton in the French language, and analogous courses in the German language by M. Platter; these last with a frankly socialistic tone.

## CONCLUSIONS.

The following are the conclusions that follow from this report:

1. A broad spirit, admitting the coexistence in the same university of divergent doctrines, and even those opposed to the opinions that prevail in the government of each canton.
2. Topics of a sufficiently large and an increasing richness. A teaching that does not fear to touch on the most vitally present and even sometimes the most burning questions. One could wish a larger share given to the teaching either of history or of the sciences auxiliary to history, and especially of philosophy.
3. Distribution very varied from canton to canton. There is wanting in general a bond between the different branches of social instruction. Nevertheless it is necessary to point out an effort at Zürich to break down the ancient division into four or five faculties, at Lausanne a project which has thus far remained on paper, and at Genera, a sanction given to these special studies by the creation of the degrees of licentiate and doctor of social sciences.

REPORT OF M. RENIRD.
It would be naturally supposed from the above report of M. Suter that there exists in Switzerland something closely approaching the ideal Lehrfreiheit of which we hear so much from Germany, but which all know to be rather an ideal than a fact. Another report, however, that of M. Georges Renard, on "progress to be realized," proceeds from the assumption that the Swiss unirersities fall far short of having attained that ideal. This report is mainly a discussion of the question to what extent professors in universities are justified in teaching: particular social doctrines as science. He puts the question in the following form:

Must we admit, in fact ii not in theory, an official truth? Shall we maintain in the chairs a State history, an orthodox philosophy, a stamped political economy? Must we subject education to the domination, I do not even say, of majorities, but of the social powers that propagate, at the expense of the whole nation, doctrines favorable to their supremacy?

Or must we say, on the contrary, No public instruction; Society has nothing to do with this field. Leave everybody free to teach and to learn what he pleases. Education is a purely private affair.

It would seem that we are caught between the two horns of this dilemma. And yet, no. Neither solution seems to us sufficient.
M. Renard then proceeds to offer his solution, and in doing so quotes from a work of his ${ }^{1}$ which appeared two years before. We can not
give space to his arguments, but his plan is stated in a single paragraph, and is as follows:

In the universities maintained at the expense of the community every important doctrine should have its place marked. As soon as a certain number of persons (the number to be fixed by law) shall demand the teaching of such or such a doctrine, which they have at heart, a chair shall be created, and the person to occupy it shall be designated by the petitioners. It can thus be made certain that the professor designated will be one of the best champions of the point of view to be represented by him. On the other hand, as soon as a doctrine taught no longer responds to a real need, it could be suppressed, whenever the proposition shall have been made under a form which it would be easy to regulate; it would be sufficient to interrogate the nation on the subject and to count the votes that demand its maintenance. There would thus be established between the doctrines and the number of chairs in which they are taught as perfect an equilibrium as possible, a varying ratio corresponding to the distribution of the members of society holding diverse opinions.

To the scientific mind such a proposition borders closely on the amusing, and its interest to sociologists is mainly as a sample of the kind of stuff that too often passes for "sociology" and leads to such remarks as the one above quoted by M. Block. There need perhaps be no more reason why a political institution should require that a particular political creed be taught than that a religious institution should require that its religious creed be taught. The objection is to the claim that in any true sense such teaching is scientific or is really instruction at all. It is simply propagandism, and as such outside the pale of science and of education in a pedagogic sense.

The report of M. Edouard Vittoz, professor at the Ecole Vinet at Lausanne, on the progress to be realized in Switzerland in primary and secondary social instruction, though mainly negative, and little more than the well-matured opinion of one competent educator, should not, perhaps, be passed over in silence. He shows that no such instruction is recognized in Switzerland, and rery little done, eren in an incidental way, to instill moral or civic principles into the minds of those who attend the common schools. Neither can he be said to favor any systematic effort in this direction comparable to that adopted in France; but having had an opportunity to become familiar with the French system, and having noted its good and bad aspects, he gives a balanced opinion on the general subject and sees ways in which he thinks the best results in this direction might be secured for his own country. Without reproducing his discussion of the question, it will be sufficient to state his condensed conclusions, which he has put in the form of a series of recommendations or desiderata (rœux), as follows:

1. Whatever definition we give to social science or the social sciences there is no reason for making this a special department to be added to the present schedules of primary or even secondary instruction.
2. In all his teaching the instructor may make use of social education. The branches of study now recorded in all or in certain of the schedules, and which best lend themselves to this form of education are morals, civics, history, and geography.
3. It is preferable that morals should not form the object of a special course requiring a definite programme. It belongs rather, in the primary and secondary grades, to an occasional and easentially practical form of presentation.
4. It is desirable to define, in Switzerland, the meaning and scope of civic instruction, and to aim more and more to render it educative and social.
5. A complete reorganization of the teaching of national history is demanded in most of our schools, as well from the point of view of method as of matter; the latter to be lightened, the former to be vivified, until this branch shall yield the important resulty of which it is capable in intellectual, moral, and social education.
6. Geography is the branch of study that lends itself best to the acquisition of knowledge relative to the political and economic organization of societies; it will not yield all the good results we have a right to expect of it unless the reforms that have already been proposed in Switzerland are boldly prosecuted, from the point of view of method as well as of the subjects to be taught.

REPORT OF M. COMBOTHÉCRA.

The report of M. Combothécra, called a report on the establishment of an international system of social instruction in Switzerland, is a brief discussion of the broader question of international instruction, and does not even favor Switzerland as the seat of such an institution, but Paris, and concludes that with sonie modifications the Collège Libre des Sciences Sociales with its École des Hautes Êtudes, might perform this function for the world at large. This is certainly an important question, and one that was made the order of the day at the meeting on December 17, 1900, of the permanent commission of the Congress to which this report was submitted. We have already considered it in connection with the report of Senator La Fontaine, of Belgium (supra, p. 1488). Belgium, too, in its Université Nouvelle, has adopted the international plan by inviting foreign professors to give lectures to Belgian students. The movement is one that deserves and will doubtless receive earnest attention.

## REPORT OF M. WINIARSKY.

The report of Dr. Léon Winiarsky, of the University of Genera, mentioned above (supra, p. 1492) by M. Suter, on the teaching of pare political economy and social mechanics in Switzerland, assumes a special importance in view of M. Gide's remark (supra, p. 1469), pointing out the lack in France of any treatment of the social sciences from the point of view of method, and calling attention to the advance in this direction that has been made in Switzerland. Walras and Pareto, of the University of Lausanne, and Winiarsky, of the University of Geneva, constitute a strong school of pure or theoretical economics and sociology, based on mathematics. As this report gives a brief
account of the history and present status of methodological social science, it deserves a place here:

## "The teaching of pure political economy and social mechanics in Suitzerland," by Dr. Léon Winiarsky, privat-docent at the University of Geneva.

Every science has two sides: A rational or pure side, which studies the most general and abstract form of the respective phenomena, and an applied side which studies their concrete and detailed form. The rigorous distinction between these two divisions, accepted in the physical sciences, is tending more and more to be introduced into the domain of the social sciences.

For purposes of instruction this distinction is of the first importance in practically accustoming students to the logical necessity of a truly scientific method and in facilitating the clear and systematic conception of the facts. It prepares them at the same time for independent personal work by furnishing them methods of investigation that are sure and necessary to any productive research.

Logicians of the first rank, like Professors Ad. Naville, Goblot, and others, show us with reason that it is henceforth impossible to employ, as absolutely as was formerly done, a method in physics, psychology, and sociology opposed to that of mathematics. The processes of the physicist, the psychologist, and the sociologist always resemble those of the mathematician more and more as they attain greater perfection.

All sciences have an abstract sile, which studies the relations between concents. These sciences of laws have, moreover, an experimental point of departure. Mathematics had at the outset a wholly empirical phase; it was only with further development that it assumed a more and more a priori character. The products of reasoning push the data of observation more and more into the shade, but they exist none the less.

At the present time in certain departments of physics abstract reasoning occupies as prominent a place as observation. The development of psychology and sociology is pursuing the same course, so that without diminishing the importance of the historical and descriptive part, which is principally based on observation, it is necessary to recognize the paramount value of the abstract and rational part. It is the mark of a good logical method, and at the same time of a good method in teaching, to introduce and strictly maintain this distinction.

Among the social sciences political economy was the first to introduce this distinction in the most rigorous way, by accepting for the rational part the mathematical form.

Cournot was the true founder of this method, having in his Recherches sur les principes mathématiques de la théorie des richesses (1838) clearly pointed out in what the application of mathematics to political economy consists, and having established the curve of demand of a commodity as a diminishing function of the price and deduced from it the mathematical theory of monopoly.

In 1854 Gossen, in his Entwicklung der Gesetze des menschlichen Terkehrs, established another curve, that of the intensity of the last want satisfied as a decreasing function of the quantity consumed, and from it he deduced the formula of the optimum division of two commodities between two individuals, so as to produce the absolute maximum utility, measured by the equal intensities of the last wants satisfied of each commodity by the two individuals (communistic sharing).

In 1852 Jevons drew the same curve as Gossen and deduced from it the formula of free exchange of two commodities between two individuals, showing the inverse proportion for each party to the exchange of the intensities of the last wants satisfied ("final degree of utility") to the quantity of the commodities exchanged (individualistic sharing).

Finally, in 1873, M. Walras, in a memoir entitled Principe d'une théorie mathématique de l'échange, explained the theory of the economic exchange of two commodi-
ties among any numker of exchangers. For this he introduced into the problem, as unknown quantities to be determined, the prices of the two commodities (which Jevons had replaced by the inverse ratios of the quantities exchanged). Then from Gossen's curve of utility he deduced the curves of demand and supply based on the condition of the maximum satisfaction of wants, expressed in a formula identical with that of Jevons.

In this way M. Walras found deductively the curve of demand empirically arrived at by Cournot, and also the curve of supply. Finally he determined the prices current of equilibrium, by virtue of the condition of equality, of the actual supply and demand, by the intersection of two curves of demand and supply.

In his Éléments d'économie politique pure, M. Walras has successively derived from the mathematical principles indicated above: (1) The theory of exchange of any number of commodities for one another; (2) the theory of production of those commodities considered as products resulting from the combination of the effects of different kinds of productive capital; (3) the theory of capitalization, or of the production of new capital, and, finally, (4) the theory of money, or the theory of the determination of the prices of products, services, and capital in a form of goods serving not only as a standard for the measure of values, but also as a medium of exchange. Finally, from all these theories taken together, M. Walras derived a theory of general economic equilibrium.

Thus was economic statics definitely established. It still remains to found economic dynamics. It is on this task that certain economists are engaged, as Mr. Patten in America.

On the other hand, some writers, as MMI. Wicksteed, Barone, Clark, and Montemartini, are completing the theory of marginal utility by a theory of marginal productivity, which constitutes, at the same time, the point of departure for a theory of the distribution of wealth. Great activity prevails in this domain of the science, as is proved by the list of mathematical economists: Marshall, Edgeworth, Launhardt, Lehr, Auspitz, Lieben, Wicksell, Rossi, Giddings, Fisher, etc. To these must be added the representatives of pure economics who employ deduction without having recourse to mathematics, such as Menger, Wieser, Sax, Böhm-Bawerk, etc.

To follow, step by step, this entire movement and set forth its progress in the successive phases acquired is the task that we have undertaken in a course that we have been giving for the past six years at the University of Genera.

Moreover, encouraged by the example of pure political economy, and convinced that this is the route that social science must necessarily pursue in order to attain a definite character, the have attempted to apply the same methods of investigation and reasoning to all the other departments of general and abstract sociology.

It is thus that we have arrived at the conception that the theory of equilibrium may be extended from economic phenomena to ail social phenomena-political, juridical, moral, esthetic, religious, and scientific; the two modes of division, the Gossenian and Jevonian, adapting themselves very well to the communistic régime of primitive societies and to the individualistic régime of the historic societies.

By extending these results attained through pure political economy to social science, we have arrived at the discovery that the fundamental equations of M. Walrasexpressing, for a party to an exchange, the equivalence of the quantities offered and the quantities demanded of various commodities at certain prices, and the proportion of the intensity of the last wants satisfied to these prices-may be deduced from the general equations of motion of Lagrange, and we have shown analytically in what way this deduction can be made. Having furnished the equations of social equilibrium, we have laid the foundations for social mechanics-on its static sideon the principle of Lagrange, that of least effort or greatest energy, i. e., on the principle that serves as the basis of cosmic mechanics.

Passing then to the dynamic side of the problem, we have given a definition of
socio-biologic energy in the two following forms: Potential (hunger and love) and kinetic (economic, political, juridical, moral, esthetic, religious, and scientific). This led us to the application of the principles of thermodynamics, the third of which, that of Clausius, explains at the same time the gradual spiritualization of every closed social aggregate and the lowering of its potential. It is the dissipation of the entropy which takes place in the social world as in the physical world.

Finally, we have shown how the principle of least effort and of the acceleration of velocity explains the gradual differentiation and integration of social aggregates by their more and more perfect adaptation to the natural and artificial environment. All this forms the subject of a course on social mechanics that we are giving under the title, "Economic bases of social science," parallel with our course on pure political economy. In fact, the point of departure of our researches was, as we have shown, pure political economy, to which we refer all social science, and bring it all back to mechanics.

In our course we do not content ourselves with the abstract or pure science, but make applications of it to the primitive and historic societies by a detailed study of the facts.

The results of our researches in pure social mechanics have been published in the Revue philosophique (March, 1898) under the title, "Essai sur la mécanique sociale," which consists of three parts: (1) L'Équilibre économique et social; (2) Les transformations de l'énergie sociale, and (3) La dynamique sociale.

A year after the publication of our memoir we were happy to learn of the appearance of two works of great value, that of Professor Hauriou, Leçons sur le mourement social, and that of Professor Lalande, La dissolution opposée à l'évolution dans les sciences physiques et morales. These works, while differing in certain points from our conclusions formulated in the Revue philosophique (March, 1898), are inspired by the same principles and tend in the same direction toward an application of mechanics and thermodynamics to social science.

In 1889 we applied these principles to the theory of the family and of property in an article published in the Rivista italiana di Sociologia (November, 1899). We showed that it is the family and property that lie at the basis of society, and that all other institutions constitute its superstructure. Finally, during the present year, we have more thoroughly analyzed (in the Revue philosophique, Febriary-March, 1900) certain points in our theory, and shown how quantitative methods may be applied to social mechanics, with a view to the creation of a sociometry.

Certain of these articles have excited an interest in foreign countries, and have been translated into Polish (Warsaw Athenæum), into German (Soc. Monatshefte, of Berlin), and into Russian (Revue scientifique de Saint-Pétersbourg). They have been reviewed, among others, by Professor Groppali, in the Rivista italiana di Filosofia (March-April, 1900), who, while recognizing the necessity of a general and abstract science of society, would reserve for it the title of pure sociology. But I would prefer the title of social mechanics, which I have given to this science, all the more as Prof. Lester F. Ward, author of Dynamic Sociology, now following this same method, is to present at the International Congress of Sociology this year a memoir entitled "Social mechanics." ${ }^{1}$
Such are the stages in the career thus far pursued by social mechanics. Though teaching it for six years at the University of Geneva, I do not think it car replace descriptive and comparative sociology represented with us with so great authority and mastery by Prof. L. Vuarin, bat I do think that it may become an independent and complementary discipline, allying itself at the same time to mathematics, political economy, and sociology.

I have ventured to inform the congress of this isolated experiment, and the first of
its kind. As to pure economics, it is already taught in a score of universities in England, America, Germany, Austria, and Switzerland, and it would be desirable that this example be followed by those of France. I am happy to add that the teaching of these sciences, which might appear dry, interests its hearers, whose number is constantly increasing.

In view of the importance of the subject and the novelty of the experiment, I have introduced Dr. Winiarsky's report entire. The question of methodology in social science will come up later (p. 1576).

Spain.<br>REPORT OF PROFESSOR ALTAMIRA.

There are many signs that Spain is feeling the effects of the general awakening on social subjects, and although little has been done there as yet in the direction of systematic instruction, the following report of M. Altamira gives earnest of future progress:
"The teaching of social science in Spain," by Rafael Altamira, professor in the University of Ocielo.

Like many other modern branches of education, that of the social sciences is wholly rudimentary in Spain. It is only by somewhat broadening the concept, and especially by not confining ourselves to the official curricula of our public instruction, that we can speak at all of the existence of these studies with us. And first of all, we must put to one side the field of popular education, which is not organized with us, at least in a manner such as we see it abroad.
I. Higher education.-In 1894, in a plan of reform in the faculty of law, the establishment of a course in sociology was for the first time spoken of. It was, however, not until 1899 that a chair of sociology was added to the studies for the doctorate in the faculty of philosophy and letters (Madrid). It was entrusted to M. Sales y Ferré, formerly professor in the University of Seville, and author of a Tratado de Sociologia, the only work of the kind that has thus far appeared in Spain. M. Sales has not yet had time to develop his system of instruction at Madrid.

Without being officially charged with sociological studies, the chairs of MDM. Giner de los Rios and Azcárate, of the faculty of law (doctorate) of Madrid have certainly a character which belongs to the subject of this report. M. Giner has at varions times in his courses on the "Philosophy of Law," treated social questions, such as socialism, anarchistic theories, etc.
M. Azcárate, who teaches "Comparative Legislation," has often devoted his lectures to the evolution of certain social institutions, such as the family, property, from the legal point of view. Other professors do the same in the faculties of law of Salamanca, Grenada, Oriedo; for example, M. Dorado in his course in criminal law; M. Vida, in treating political right; M. Buylla, in economics; M. Posada, on political right.

But, as is well known, these are rather ways of looking at their subjects, methods suggested by the free initiative of the professors, than modes of instruction laid down in the official regulations.

At Oviedo there has also existed for some years a practical school of juridical and social studies, directed by Professors Buylla, Posada, Sela, and myself, and formed by students of the faculty of law. It is divided into four sections: Economy and finance, politics and sociology, international questions, and history of law. In the first, where study of the joiner's trade at Oviedo has been made after the monographic method of Le Play and Marouseem, there is taking place a discussion of socialistic docirines. In the second, papers have been prepared on the Sociology of Spencer
and Fouillée. In the third, they studied in 1898-99 the subject of colonization in all its aspects. In the fourth I engaged the students in researches into the ancient and modern juridical customs of the Asturians, making personal inquiries among the peasants and in the small towns.
II. Secondary and primary instruction.-There is unfortunately nothing to point to in these two grades of public instruction. The minister of public instruction, agriculture, and public works (Fomento), M. Groizard, tried to introduce into the secondary schools a course in customary law (droit usuel), and a certain sociological character in connection with some studies. But his reform was soon replaced by other less advanced plans.
The teaching of sociology figures, so far as my information extends, in the courses of only one private institution, the Institucion libre de Enseñanza, created at Madrid in 1876, and which has been since that time the most characteristic pedagogic center, in the modern sense, that we have. It comprises two grades-secondary and pri-mary-arranged in one series of "general culture," formed by numerous classes, with a concentric curriculum. Sociology is taught there from the first year, and according to the following method: In the lower (maternal) class there are simple talks (causeries) with the children about things with which they are familiar, and questions directed simply to attracting their attention to social facts of which they are daily witnesses-services, trades, corporations, public authorities, factories, markets, churches, schools, etc. Occasionally rapid visits are made to public institutions, with very few explanations, the teacher even declining, in order to avoid complication, to answer all the questions asked by the students. In the next classes the facts are little by little systematized, by grouping them and bringing out of them more and more the idea of society which gives them unity. Visits (excursions) are more frequent, and the pupils begin to make little reports on them. In the upper class a systematic but elementary course is given on simple topics. Excursions are also more frequent, organized, and, with explanations, the method of instruction is wholly oral by means of conversations, followed by a brief résumé made by one of the pupils, and written notes which each one takes freely (during eight or ten minutes) in his notebook. These written summaries are read at the next meeting of the class and corrected by the teacher. No books nor works of any kind at the school. The schedule of the course is drawn up according to the following plan: Introduction: Idea of sociology. General part: Society, its elements, functions, etc. Special part: (1) Complete (totales) societies (family, commune, nation); (2) special societies (classified according to their object). Special pains are always taken to have the remarks apply to contemporary social problems.
III. Private initiative has also provided for the scientific need in this direction by founding at the Ateneo de Madrid (a literary and scientific society) advanced courses (formed by free enrollment and nearly gratuitous), some of which are of a sociological character. M. Azcárate has given one of these courses on the concept of sociology, critically expounding the works of Spencer and Mackenzie, another on the plan of sociology, and a third on social philosophy. M. Sales y Ferré has also given some lectures on sociological subjects; M. Posada on the "Theory of the state according to modern sociological doctrines;" M. Alas on "Religious theories in contemporary philosophy," and M. Salillas on "Criminal anthropology."

At the press association (Madrid) M. Azcárate also opened, in April, 1900, a course in sociology.
IV. A review of law and sociology (Revista de Derecho y Sociologia) was founded in 1895 by M. Posada, with the collaboration of several professors and writers, but it did not survive the first year of its publication. At Madrid there now appears a Catholic Review of Social Questions, the very narrow views of which have thus far prevented the collaboration of all sociologists of repute.

The publishing house España Moderna publishes a library of jurisprudence, phi-
losophy, and history, in which several translations of the sociological works of Spencer, Guyau, Kidd, Tarde, Fouillée, d'Aguanno, Giddings, etc., have appeared. A new "iibrary of philosophy and sociology" has just been inaugurated at Madrid. It announces especially translations of foreign books.
$Y$. It is necessary also, and quite particularly, to mention the lectures on customary law and popular cconomy opened by the Academy of Political and Moral Sciences. According to the very broad prospectus published, the bases of which are to be found in the excellent works of M. Costa, one of our most illustrious sociologists and historians, the works that will result from these lectures will be true sociological monographs from the point of view of law, economy, and social organization in Spain. On this subject we already have a wholly original literature, which might furnish new and rery rich data to foreign sociologists.

We are, as is clearly seen, at the very beginning of sociological studies. Everything, or nearly everything, is to be done with us in this matter, but nothing solid can be built up in this line without being founded upon a broad and earnest development of instruction in the social sciences in our public institutions. To attain this end it will be necessary first to found courses in the facuities of law and philosophy (for students of the second year in the licentiate course) and at the central normal schools. It is only after having formed a numerous teaching body that the introduction of these studies into the primary and secondary schools can be undertaken with any hope of success.

The creation of an international system of social instruction will have the effect of specially benefiting countries which, like Spain, are backward in this respect. It would offer our students and candidates for professorships a rallying point for their studies and facilities for attending foreign free universities and colleges. It would, in fine, be the bond that would first unite all Spaniards who cultivate these sciences, and would bring their work in contact with that of their colleagues in other countries in a more regular and complete way than it is done to-day. The Spanish members of the congress of instruction in the social sciences will, in my opinion, make every effort for the accomplishment of this purpose.

## Italy.

Only one report was presented to the congress on social instruction in Italy. Judging from what we hear of the sociological movement in Italy, this would seem strange. A sociologist in a foreign country as remote as the United States, but who keeps abreast of this movement, reads the books and reviews, and notes the output of that country, might hesitate whether to place Italy or Belgium second in rank in point of sociological activity. With its Lorias, its Nittis, its Morsellis, its Cosentinis, its Groppalis, and the rest, pouring forth a stream of advanced literature on the subject and supporting several live sociological journals, it appears to a looker-on as if Italy was enjoying a veritable sociological revival or renaissance in these days. But a better acquaintance with the facts shows that this real movement there is searcely connected with the educational system of that country, but is the work of a not altogether harmonious body of independent thinkers, alive to the state of things in their country, and determined if possible to arouse their slumbering countrymen to the true state of the modern world. That their efforts have thus far borne little fruit on their own soil may be fairly inferred from M. Niceforo's report, which
is rather the lamentation of a modern Tacitus than a statement of results in Italy in the direction of social instruction. It is, however, interesting reading, and breathes the spirit of progress not altogether deprived of hope.

## REPORT OF ILFREDO NICEFORO.

"Instruction in the Social Sciences in Italy," by Alfredo Niceforo.
Education is divided in Italy, as in all other nations, into three grand divisionsprimary, secondary, and higher education. To primary education belong the elementary schools; to the secondary, the lyceums, technical schools, and normal school*; to the higher, the universities and higher institutions.

The social sciences have scarcely commenced to be taught in certain branches of the secondary schools. Thus in the lyceums there is scarcely any trace of this branch of education, and it is only in the technical institutions that two years are devoted to the rudiments of political economy. This consists in offering elementary ideas of the science, and constitutes an instruction of only second or third rate. In the normal schools, from which come the elementary teachers, they also teach the elements of political economy during one year. This forms a sort of dry, cold, catechism without any importance, and without any practical value, which the student mechanically stows away in his memory.

It is only in the universities that the students become a little better acquainted with the social sciences. In each university there are courses in political economy, statistics, the science of finance, the science of administration, etc. But these courses all last one year only, at the rate of three hours per week, and they are given much less importance than is accorded to the juridical sciences taught in the same universities, the teaching of which often lasts two or three consecutive years.

There is only one single special institution for the teaching of the social sciences, riz, that at Florence, called the Institute of Social Science, and attended particularly by those who are aiming at a diploma. This institute has, however, a rather limited scientific ralue. In the first place, in order to enter it, it is not necessary to have made very thorough studies, and a diploma can be got without any trouble after three years' instruction. Moreover, the character of those who attend this institute prevents it from acquiring any great scientific efficiency. The students do not have scientific culture or the advancement of science for their object, but simply wish to gain the gilt-laced coat of an embassy or a consulate, and when they have secured this they drop their studies and close their books.
That which is completely wanting in Italy is popular universities and private institutions for the popularization or the teaching of the social sciences. Only at Turin, Prof. Cognetti de Martiis has opened at the university a laboratory of political economy, which he has created of his own initiative, and in which students who so desire may, under the direction of the professor, develop and work out interesting themes of social science, and especially of political economy and statistics.

There are also academies where, in some sessions, they deal with the social sciences, as the Accademia dei Lincei, the Lombardy Academy, the Naples Academy, etc., but these institutions not only have no didactic character, but, besides, they have the fault common to all academies of being bodies of orthodox fossils, closed to all new ideas, and cultivating an old dusty science that has no practical value.

As we see, instruction in the social sciences is very much neglected in Italy. The great mass of Italian youths pass through the lyceums and arrive at the universities without having the least idea of the social sciences. Then in the universities not only is this instruction far from sufficient, but it only occupies a secondary place in the university studies.

The reason for the neglect to which the official instruction condemns the social sciences is this: The social sciences represent modern culture and the culture of the future, whereas Italy has, as have also, unhappily, her Latin sisters, mummified herself in the contemplation and idolatry of the teachings of the past.

From the high official chairs are taught not the modern sciences, but old decrepit sciences. In this way the science that represents the modern spirit is left in the second rank, and young men are required to pass their entire youth in the useless study of Greek, Latin, and the old juridical disciplines which represent antiquity.

Official Italy somewhat resembles those degenerate and idiotic descendants of great patrician families, who console themselves for their present impotence by boasting and by contemplating the glory of their ancestors. And because Italy has had a glorious past of Greek and Latin history, it continues to-day to contemplate that past by seeking to give it a new life. It does not perceive the changes that have taken place in civilization, and does not understand that to seek to resuscitate to-day-in the age of electricity and the positive sciences, in the century of Darwin, of Spencer, of Comte, and of Lombroso-the old passion for Latin and Greek poetry, is like trying to restore to life a dead body and make it share in the life of the living.

The ideal, as well for men as for nations, consists in looking to the future, and not in looking to the past and being satisfied with that. He who looks to the past stops still and falls into decadence. Italy is atiacked in its official culture by a terrible disease which I will call the disease of Latinism. It remores and sets aside from official education all the modern sciences, among which the social sciences occupy so great a place, and it insists on propagating from the high seats of learning enormous quantities of the old culture-useless and dangerous old Latin culture. Such is the disease and such the mistake. Italy resembles those damned in Dante's Inferno, who, condemned to have their eyes in the back of their necks, always looked behind them and walked backward.

There is a new and additional consideration which will show still better the little benefit that the present teaching of the social sciences can yield in Italy. In the social sciences, as in every other modern science, there are two currents-the metaphysical current, which clings to the old logic of the middle ages and to the philosophy of the convents and of the spiritualists; and the positive current, which openly revolts against the old empty doctrines and which adtheres to the method of Comte and Spencer. Now the great majority of the professors of the social sciences in our universities belong to the old metaphysical school, and form a sort of caste, who dispense the chairs solely to those who have the same ideas that they have.

Enrico Ferri, with the sharp eye of a criminalist, has called these eastes, which have to-day taken possession of Italian official instruction, the camorre of science, and the camorra, as we know, is a criminal association which exists in the low and the high Neapolitan classes. These castes are not only masters of official instruction, but find ancther powerful support in the superior council of public instruction, which is a sort of holy inquisition, where, more than anywhere else, the spirit of archaism and metaphysics reigns. And as well the camorre of science as the superior council of public instruction have known how to prevent criminal sociology from being officially taught, which is among the youngest and strongest of the social sciences, and to which they have not been willing to concede the title of a science-even casting doubt upon its existence.

Thus Italy has fallen into the error of compelling young men to absorb the only intellectual food of a culture de luxe, such as the minute study and anatomy of those great fossils, the Greek and Latin world, while she neglects to furnish them with a more substantial nourishment, viz, the study of modern sciences, whether experimental or social, really useful in the daily struggle for existence. ${ }^{1}$ It recalls the saying of a princess of Versailles, who, learning that the people were complaining and

[^46]rising because they had no bread, näively exclaimed: "If they have no bread let them eat cake!"

All that we have said leads us, it would seem, to pessimistic conclusions relative to the teaching of the social sciences in Italy; but, on the contrary, we are firmly convinced that this crisis will have an end, and that the times will change and Italy will. be able to take among nations the highest rank in the study and diffusion of the social. sciences. Alongside of the official science of Italy to-day-a science which, as we have seen, has a very feeble existence-there is rising an extra-official science, so tospeak, which is very flourishing, and under the influence of which the future will begin its triumphal march. There is in Italy an excellent body of studious and thoughtful people, who have kept aloof from the universities, the chairs, and the conducting of public instruction on account of their political and scientific ideas. These are cultivating the various branches of the social sciences with so great vigor and boldness that, as soon as they shall have won the place to which they are entitled in university teaching and in the superior council of instruction, they will give a powerful impetus to the teaching of the social sciences and to truly modern education in Italy. It will be enough to mention among these thinkers, Cesare Lombroso, Enrico Ferri, Scipio Sighele, S. Ottolenghi, Adolfo Zerboglio, M. A. Vaccaro, for criminal sociology; Guglielmo Ferrero, Giuseppe Sergi, Pietro Chimienti, Napoleone Colajanni, Ettore Ciccotti, Enrico de Marinis, etc., for sociology; Augusto Bosco, Maffeo Pantaleoni, Arturo Labriola, for statistics and political economy, and many others who have done Italy more honor by a single one of their scientific works than all the high priests of official science have done in the years and years of their inane and sterile teaching.

These thinkers are young, not necessarily in years, but in ideas; the others areold. But poets may cover age with flowers as long as they like, it is none the less true that the old do not know how to do anything but ruminate, while the young. know how to create. And as the old have given Italy an old education which looks to the past, there will come a time when the young, once having won their places, will know how to give Italy a new, modern education, which will look toward and: comprehend the future. Is it not a characteristic virtue of youth to think of the future, as it is a characteristic failing of the old to think of the past?

This remarkable essay, for it is scarcely a report, of Signor Niceforo, should be read by his own countrymen, and answered if it fails, to represent the true state of things in Italy. Italy is the only country in the world of which it can be said that twice in the world's history the vanguard of civilization has encamped upon her soil, and although, as Sergi shows, and as all admit, she has been distanced in the race by the more western and northern nations, may she not, when France, Germany, and England shall have felt the pall of decadence, rekindle the still smoldering embers of her Roman and medieval greatness and rise a third time to self-realization? It is at least safe to say that if this ever occurs it will be the result of some great change in the system of education by which the entire population shall be put in. possession of the world's store of truth. Many believe that the system of education in France under the present Republic is rescuing. that land from the asphyxia that threatens all Europe, and Italy may learn to profit by the example of France. Neither should she forget the prominent rôle of social instruction in France.

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Three short reports on social instruction in Germany were presented to the congress. That of Prof. Paul Barth, of Leipzig, was explained by himself and quite fully discussed. Professor Barth, though a young man, is already well known as the author of a somewhat remarkable work entitled: Die Philosophie der Geschichte als Sociologie, of which a second part is in preparation. With the historical proclivities of a German, Professor Barth sees little in sociology that is not properly included in the philosophy of history, but this limited view of the science is not due to any lack of familiarity with the data of his thesis, for there is perhaps no work extant that more ably and broadly marshals the chief literature of sociology than does this volume, and many leading doctrines are subjected to a keen and somewhat merciless criticism. No one is therefore more competent to present a report on social science than Professor Barth, and it is to be regretted that he did not make it much more full and less objective. As will be seen, however, and as any sociologist might have foreseen, the brevity of treatment is largely due to the small attention paid in Germany to social instruction. Although going profoundly into social science, as into every other science, the Germans have never taken kindly to the name sociology for the science of society, and although the so-called German historical school scarcely does more, as Barth practically admits, than carry farther and deeper the historical method adopted by Comte, who was its real founder, still the German mind has rarely risen to the comprehension of a true social science looking beyond the interpretation of the events of the past and promising practical advantages for the future.

## REPORT OF PROFESSOR BARTH.

Professor Barth's report is confined to the work of the universities, but does not stop with those of Germany, and includes German-speaking chairs in Austria and Switzerland. It is as follows:

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"Sociological instruction in Germany;" by Paul Burth, professor in Leipzig.
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One can scarcely speak of sociological instruction in Germany except in connection with the universities. The institutions for secondary instruction (lyceums that prepare for the classical and modern baccalaureate, as also the business schools) do not make a special study of economic and social facts; the ideas that they give of them only form a part of universal history, literary history, and religious history. But even in the universities, at which the German language is spoken, there is not one, either in Germany, or in Austria, or in Switzerland, that possesses a chair of sociology properly so called, no more among those who deliver courses of lectures than among the titulary professors. It is, on the contrary, everywhere the representatives of the older sciences allied to sociology or the ones out of which it has sprung (philosophy, political science, ethnology, etc.), who admit the study of social theories into their courses. Nor do these all do so; but a certain number do something of the kind, so that there are scarcely any universities totally deprived of sociological instruction.

In the first place there is a certain number of professors or lecturers who announce
and give courses under the specific title of: "Course on sociology or the philosophy of history." I will give a cursory view of what has been done from the summer semester of 1894 to the winter semester of the present year (1899-1900). ${ }^{1}$

At the University of Berlin, Dr. G. Simmel has, in these last six years, given almost every semester a course in sociology (general sociology, social psychology, or practical exercises in sociology).

At Bonn, Prof. E. Gothein has also, during the winter of 1898-99, given a course in sociology: "Introduction to the study of the political and social life of the present day."

At Breslau, during the winter of 1896-97, Prof. W. Sombart studied the theories of the state and of society from the point of view of historical materialism.

At Freiburg in Breisgau, during the summer of 1895, Prof. E. Grosse gave a course on the fundamental problems of sociology, and during the winter of 1896-97 on the different forms of the family, and Prof. H. Rickert (winter of 1898-99) on the philosophy of history as an introduction to the mental sciences.

At Greifwald, Prof. E. Bernheim discoursed (1) during the winter of 1891-95, on the origin of religions, of the family, of the state, and on other problems concerning the history of civilization; (2) during the summer of 1899, on the evolution of social democracy and on the materialistic conception of history.

At Halle a. d. Saale, Prof. Th. Sommerlad, during the winter of 1898-99, gave a course on the origin, the essence, and the significance of the materialistic conception of history, and Prof. R. Stammler (winter of 1894-95) on the theory of the social question.

At Heidelberg, Prof. H. Scherrer has given each semester, at the rate of two hours per week, a course on sociology.

At Jena, Prof. R. Eucken, during the winter of 1895-96, lectured on some problems concerning the philosophy of the state and the philosophy of history.

At Kiel, Dr. F. Tönnies, during the summer of 1898, gave a course on the statistics of moral facts, and during the winter of 1896-97 directed practical exercises in sociology. During the winter of 1897-98 he lectured on the philosophy of the political sciences, and in the summer of 1898 gave a course introductory to sociology. Finally, during the summer of 1899 he spoke on the elements of sociology.

At Königsberg, Prof. J. Walter, during the winter of 1895-96, gave a course on "The bases of a philosophy of history." Prof. O. Gerlach gave, during the summer of 1896, practical lectures on political economy (explanation of Stammler) and a course on political economy and law, from the point of view of historical materialism; during the winter of 1899-1900 he talked on social philosophy.

At Leipzig, Prof. P. Barth, the author of the present report, gave during the winter of 1895-96 a course on the empirical philosophy of society and of history, and during' the winter of 1898-99, on the problems of the historical sciences and of the philosophy of history. Prof. E. Brandenburg, during the winters of 1897-98, 1898-99, and 18991800, lectured on the materialistic conception of history.

At Nunich the courses of Prof. W. Riehl, who died in 1897, might perhaps be regarded as courses on sociology. The following were the subjects treated: Systems of economy and of the political sciences; history of civilization from the time of the Reformation to the eighteenth and nineteenth centuries, etc. Perhaps we might also mention the course which Dr. G. de Hertling gave during the summer of 1899 on the relations of the state, of society, and of law.

At Strasburg, Prof. W. Windelband gave during the summers of 1897 and 1899 a course on Comte and positivism, and Prof. P. Hensel, summer of 1898, on social seience and history.

[^47]At Erlangen, Giessen, Göttingen, Marburg, Münster, Rostock, Tübingen, and Würzburg no courses on sociology were given during the period mentioned.
As regards the Austrian universities, we might perhaps mention Innsbruck, where, during the year 1895, Prof. K. Ueberhorst gave a course on modern theories of the philosophy of the state. Prof. R. de Scala gave a course there on the philosophy of history in antiquity.

At Vienna Prof. L. Hartmann gave, during the summer of 1895, a course introductory to historical sociology.
In the other Austrian universities at which lectures were delivered in the German language, at Prague, at Gratz, at Czernowitz,-no courses on sociology are registered.

In Switzerland it is the University of Bern that offers the largest number of courses in sociology. Prof. L. Stein, in fact, gives one almost every semester.

At Zürich, Prof. L. Förster gave, during the winter of 1898-99, a course on the social philosophy of K. Marx, and during the summer of 1899 Prof. J. Ruhland gave one on an introduction to the methodology of the social sciences.

At the University of Basel no course on sociology was given.
All these courses, which may be directly classed under the title of "Sociology," do not, however, exhaust a complete sociological system of instruction. Theories and facts relating to social questions are often taught under the following titles: History, anthropogeography, political science, science of the State, philosophy of law, ethnology, history of civilization, pedagogy, history of pedagogy.

No review devoted exclusively to sociology exists in Germany, but the reviews of the political sciences embrace also sociological facts, especially the Zeitschrift für die gesammte Staatswissenschaft, directed by A. Schaeffle, and the Zeitschrift für Socialwissenschaft, directed by J. Wolf. Among the philosophical reviews it is especially the Vierteljahrschrift für wissenschaftliche Philosophie, directed by P. Barth, which pays attention to the problems of sociology.

Why is sociology still so far behind in Germany? At the time when Comte founded sociology in France, the metaphysics of Hegel reigned in Germany, and with it his philosophy of history, which did not offer much bolder interpretations than the system of Comte. But that philosophy of history could not be connected with the metaphysics of Hegel, nor with the positive sciences already existing, while Comte worked his sociology into a general system of the sciences. The distrust of metaphysics that was gradually spreading, and which was to end in the fall of the Hegelian school, finally reached the philosophy of history united with that system of metaphysics. Like the metaphysical conception of the philosophy of nature, it seemed rather to shun and push aside investigation than to be favorable to it. Men wished first of all to study facts without preconceived ideas. In the natural sciences they long ago returned from the older contempt for all general philosophical systems. In history they have stayed by the former conception. The German historians still distrust all theory of history, and consequently all sociology. As to the philosophers, they find in it, for the most part, too few certain results, and prefer, in general, to keep aloof from it rather than to work for its progress. However, every year the foundations of sociology are becoming more solid, its method more exact and more fruitful in results, and more and more it will be possible for it to explain the past and to forecast the future. Thus I have the conviction that it will each year gain in importance in the German universities.

IREPORT OF PROFESSOR LEX1S.
The report of Prof. W. Lexis, on instruction in the social sriences in Germany, occurs among the papers of the Congress without explanation as to what institution, if any, he represents, or what titles he bears. He is, however, evidently well informed on his subject, and
his report confums in the main, so far as the universities are concerned, the statements of Professor Barth. But it contains in addition some general remarks on secondary instruction in social science in Germany, which it may be well to reproduce. He says:

The social sciences are represented in Germany in a really scientific way only in the universities, and up to a certain point in the higher technical schools. This is due to the nature itself of these questions, for the institutions for secondary instruction do not have for their object to contribute to the progress of this or that science, but only to transmit to students a certain amount of knowledge according to the degree of intellectual development and general culture of these students.

But inasmuch as these institutions teach, for example, the elements of physics, their schedule might include the principles of political economy and a survey of the constitution and administrative organization at least of our own country. It is thus that in France in the first class of modern primary education, one or two hours each week are devoted to public economy and law, and that, besides this, the teaching of philosophy sometimes encroaches upon the domain of the social sciences.

In the schedules of instruction in the German gymnasiums, the gymnasiums of modern instruction, and superior schools of modern instruction, the social sciences have no special place. Nevertheless, according to the regulations put in force in Prussia, in 1892, the teaching of history in the Untersecunda and Oberprima classes includes matters bearing on the economic and social problems of the present time. It goes without saying that social theories and criticisms of the existing social order should be excluded from such teaching.

Thus it is enjoined, in the methodical interpretation which is attached to the schedule in explaining these questions to the students, to avoid taking sides in any definite way and to assume a scientific attitude and show objectively the historical evolution of the relations between different classes, and especially of the working class, and finally to point out the constant progress toward the better, and the evils of any attempt to modify, by violence, the established social order.

The very small number of class hours devoted each week to the teaching of history leaves for such digressions into the field of the economic and social sciences a wholly inadequate amount of time. The result is that in the majority of the institutions the students remain, so to speak, total strangers to these questions.

One can scarcely expect to see such a method of instruction work satisfactorily, because the list of studies of the schools in question is extremely full and requires twenty-eight to thirty hours for the obligatory classes, while in France this number does not exceed twenty to twenéy-four. Still, for purely practical reasons, it would be desirable that the students in these schools should acquire some real knowledge of the organization and operation of the obligatory workingmen's insurance system, in view of the fact that nearly everybody in Germany, whether employee or employer, is obliged to have to do with this system.

There are, in fact, in Germany 8,500,000 persons insured against sickness; 12,000,000 have secured insurance against ill health or old age, and $18,000,000$ persons are insured against accident.

The higher commercial schools are provided with a course of instruction in political economy, designed to answer practical necessities. But these schools remain outside of the scope of official secondary instruction, and are not at all aided by the State, but only by towns or private corporations.

In the primary schools there is nothing that can be designated by the name of instructions in the social sciences. The most that can be said is that the reading books contain some selected pages relating to public or economic institutions.

But it would at least be well if the pupils of the primary schools could learn clearly to understand these workingmen's insurances, which will later have such beneficent effects for them.

Austria.
In the two reports last considered the Austrian universities are treated, and the treatment by them of the social sciences is substantially the same as that of the German universities. Still, there must be some difference which would be perceptible if we had fuller data, for it is well known that there has grown up a distinct Austrian school of economics differing widely from that of Germany, and although the University of Gratz was put down among those whose courses of study did not include that of the social sciences, it is there that a chair is occupied by one of the leading sociological writers, Professor Gumplowicz, whose theory of the origin of society, of the State, and of nations has exerted a powerful influence on all sociological thought. It is also to an Austrian, Gustar Ratzenhofer, that we owe the greater broadening and systematization of this same principle, but Ratzenhofer does not appear to be connected with any institution of learning, but is the president of a military court.

## REPORT OF PROFESSOR IHAUSER.

The only report on the teaching of social science in Austria is one sulmitted by M. Henri Hauser, professor in the University of Clermont-Ferrand, France, and which he compiled from the catalogues of the Wiener volksthümlichen Hochschulkurse, a sort of "popular university " apart from the regular State institutions. As such it has an especial interest and direct bearing upon vur subject. The substance of the report is as follows:

Note on social instruction in the Popular University of Tienna, Austria, by Henri Hauser.
The Popular University of Vienna is a direct outgrowth of the University of Vienna. The courses are given, however, outside of the central university building, either in the university institutes, or in the school halls, or at local workingmen's associations. They are given by professors, privat-docents, adjuncts, and assistants of the university, and exceptionally by other persons, under the direction of a commission chosen by the university from among its number. The president of this commission is Prof. Anton Menger.

The field of labor of the Popular University is "all scientific domains that admit of popular exposition." Although the statutes formally exclude "courses on questions which relate to political, religious, and social controversies of the present time," social instruction is far from being banished from the Popular University. We have noted in the catalogues all the courses that clearly indicate a social character, without mentioning numerous courses in hiscory, anthropogeography, and morals, which help to form a popular system of social instruction.

In the first year Dr. Fr. Tezner commenced a course, which was regularly resumed during the following years, on Austrian constitutional law. This course in its present form embraces six lectures: ${ }^{1}$ The separation of the powers, the ministerial organization, "self-government," the parliamentary control, the judiciary power,

[^48]the Austro-Hungarian monarchy. A course on the foundations of Austrian law and another on demography were also delivered in the first series (November-December) ; in the second (January-February), in continuation of the course on constitutional law, there was added a course on civil and criminal procedure.

The next year there appear lectures on the jury, on the old and new industrial constitution in Austria, on the liberation of the peasants and freeing of the soil in Austria, on the new civil procedure, on the general rights of citizens. In 1897 appears the history of political economy, fundamental concepts and their antiquity. In 1898-99, economic history down to the end of the Middle Ages, the birth of economic science, civil procedure. These courses were attended respectively by filty-two, twenty-one, and thirty-five auditors, that on constitutional law (general rights of citizens) by thirty-nine.

In looking through the schedules of this year we find:
(a) Six lectures on "Juridical questions and questions of daily life." The professor (privat-docent Dr. Gustav Walker) examines the basis of existing private right, marriage law, the rights of parents and children, the social and judicial position of illegitimate chiidren, action for seduction, the search for paternity in French law, in German practice, in Prussian and Austrian law; guardianship, contract labor, contract rental, loan and usury, the right of combination, civil procedure, corporate right of the laborer, procedure in execution. This course has been given twice-in October-November and in January-February.
(b) "Efforts for the maintenance of international peace," three lectures by privatdocent Dr. Strisower: (1) Peace as an ideal (the desire for peace throughout history and in the nineteenth century, the apologies for war); political efforts in favor of peace (the idea of equilibrium, the direction of Europe by the great powers); moral efforts in favor of peace (pacific literature of the eighteenth century, the peace programme and peace propaganda of the nineteenth century, official acts and their results. The final object: The idea of disarmament and courts of arbitration).
(c) "History of political economy (national economy)," by Prof. Karl Grünberg.
(d) "Penal law, the different kinds of crime," by Dr. Löffer.
(e) "Penal procedure," by the same.
$(f)$ "Austrian constitutional law" (see above).
(g) "Elements of the economic history of Germany," six lectures by privat-docent Dr. Kurt Koser. After a general exposé of the leading forms of economic evolution, the professor studies the period from prehistoric times to the Carlovingian epoch, then the economic development of the tenth to the fourteenth century (internal colonization, urban civilization, the economic revolution of the twelfth to the fourteenth century, the ròle of silver), the social crises of the fifteenth and sixteenth centuries (the societies, the bank, the rise of prices, the urban proletariat, social groups in the cities, the peasants, the social revolution of 1525 ), the fall and subsequent rise of German social economy from the sixteenth to the eighteenth century; he concludes with a rapid survey of economic evolution in the nineteenth century.
(h) "General rights of citizens" (see above).

This makes then, in all, for four series of lectures, lasting from October to Easter, eight courses that enter directly into a scheme of popular social instruction. Certain of these courses awaken in their hearers a sufficiently constant interest to justify their repetition every year or every other year. One of them, that on customary law, was even delivered twice in one and the same semester. It is therefore a thoroughly earnest effort.

It will be remarked that if certain of these courses have for their subject things already familiar to a popular audience, and possessing an immediate practical interest, others, on the contrary, rise to questions of high scientific generality.

It is to be noticed that in the attempts at extension by the university outside of Vienna, no courses relating to social instruction appear as yet.

## Hungary. REPORT OF DR. GOPCSA.

A very short report was submitted to the congress by Dr. Ladislas Gopesa, secretary to the ministry of worship and public instruction of Hungary, on the teaching of the social sciences in that country. It is as follows:

## I.

In Hungary instruction in social sciences is given in the two universities (Budapest, Kolozsvár), at the Polytechnic School (Budapest), and in the ten schools of law: Pozsony (Presburg), Kassa, Nagy-Várad, Eger (Erlau), Pécs (Fünfkirchen), Marmaros-Sziget, Debreczen, Keckskemét, Sárospatak, Eperjés.

1. At the University of Budapest these doctrines are taught by four titulary professors and by five privat-docents. The four titulary professors give the following courses: Financial science and financial law (four hours per week); theory of the court of accounts (five hours) ; political economy (four hours); statistics (four hours). Among the privat-docents, two give courses on statistics, one a course on political economy, and one a course on financial science
2. At the University of Kolozsvár-Klausenburg the social sciences are represented by three professors: Hungarian law of finance (four hours per week); statistics (four hours); political economy (five hours).
3. At the Polytechnic School (arts and craits or central school) political economy is taught (four hours per week); finances (two hours); economic and industrial accountability (four hours).
4. Schools of law (called academies of law).

Pozsony (Presburg).-Two professors teach the social sciences; one political economy, the theory and law of finance (eight hours per week) ; the other statistics (five hours).

Kassa (Cassovia).-Two professors-one teaches political economy (five hours) and the law of finance (five hours); the other statistics (two hours).

Nagy-Tarad (Grosswardein).-Two professors-one teaches political economy (six hours); the other the law of finance (five hours). -

Eger (Erlau).-Two professors-political economy (five hours); law of finance (five hours) ; statistics (one hour).

Pécs (Quinquecclesial).-Two professors; political economy (five hours); law of Hungarian finances (five hours) ; statistics (two hours).

Mármaros-Sziget.-Two professors; political economy (five hours); law of finance (five hours).

Debreczen.-Two professors; (1) Hungarian political economy (three hours); general political economy (four hours); (2) statistics of Hungary (five hours) ; statistics of other European States (three hours).

Keckskemét.-Two professors; theory of finance (five hours); statistics of Hungary (five hours).

Sárospatak.-One professor; political economy (five hours); law of Hungarian finances (five hours.)

Eperjés.-Two professors; political economy (five hours); Hungarian law of finance (five hours).

## II.

Besides the universities and the law schools there exists at present in Hungary only one institution, the Free Lyceum (Szabad Lyceum), at which the social sciences are taught. This lyceum-continuation school work-applies chiefly to the laboring classes (workmen and employees on the State railroads; industrial workmen and employees; the middle class). It is principally the professors in the lyceums who give
the lectures. In the year 1899-1900 this lyceum, which has been in existence since 1883, gave at Budapest-
(1) For workmen on the railroads, twenty-eight lectures, attended by 2,680 persons. (2) For industrial laborers, thirteen lectures ( 100 to 150 persons at each lecture). (3) For the middle class, one hundred and five lectures, with 4,458 hearers. Among these lectures the social sciences occupied fourteen, with 404 hearers.

The Free Lyceum has also organized lectures in certain cities of the country (Zombor, Temesvár, Szabadka, Pápa, Pozsony, Locse, Szkély-Udvarhely).

The Free Lyceum has 26 founder members and 530 ordinary members. Its president is Alexander Wekerlé, former president of the council. Its secretary is Laurent Hegedus, deputy.

The minister of public instruction, M. Jules de Wlassics, has lately called a conference to introduce into Hungary university extension, which will cooperate with the Free Lyceum, with the aid of the professors of the higher institutions.

It is clear from the above that the so-called instruction in social science in Hungary is little more than a political training to fit the citizen for grappling with the complex issues that confront him in a country in which the process of social equilibration is still in a highly active state.

Russia.

## REPORT OF PROFESSOR TCLOUPROV.

A shor't report was submitted on the teaching of the social sciences in Russia, by Prof. A. Tchouprov, of the University of Moscow:

There is no sociological instruction, properly so-called, either in our higher or our secondary schools, but this is not the case as regards the concrete social sciences, such as pure or applied political economy, the science of finance and statistics.

In beginning our sketch with the primary schools we have to note the fact that some economic ideas are inculcated there, not by means of oral teaching, but by readings given in common by the teacher and the children of both sexes who follow his course. The initiation of the greater part of our rural population into the social laws and the necessary relations of the individual to the State is confined to this.

As to the secondary schools or gymnasiums, the school statute of 1804 had introduced into them the study of political economy, statistics, natural right, and the raw of nations. But already, at the end of the reign of Alexander $I$, when the formidable reaction began, of which the minister, Arakcheieff, became the principal leader, of all these scientific branches there was retained only statistics, which, since 1844, was in its turn combined with geography. It is thus that the social sciences disappeared entirely from the studies of our gymnasiums, and that at the present time a young man of 18 or 19 years who should not be able or desire to continue his studies in some higher institution, is reduced to the necessity of gaining his own social education, which in fact only within the last few years has become possible, thanks to the number of books and tracts treating economic and social questions which the principal publishing houses are offering to the public at very low prices. The majority of these writings have, moreover, been translated from German, French, or English under the supervision of some Russian scientist or scholar, always ready to undertake the thankless labor of revision, for the most part gratuitously.

A word now as to our secondary technical schools. There are taught there, if not sociology, at least the elements of economic science and statistics, this last forming a part of the course in history and commercial geography. What I have just said is the rule for all the sections of commerce that exist in the majority of our secondary real-schools, i. e., those in which the dead languages form no part ot the course of
instruction. They content themselves, moreover, with giving two lectures per week in political economy, and that only for the closing year. This does not make it possible to give any great attention to the explanation of the fundamental principles of economic science. They prefer to treat more thoroughly the questions of their application.

A deeper study of the same subjects is made in the commercial schools, properly so called. It is thus that in a school at St. Petersburg, called the School of Peter (the Great), they have organized lectures on political economy in the two higher courses. The number of these lectures is two per week. They also give during the last year a course on the history of commerce and of commercial law.

At the Practical Academy of Commercial Sciences at Moscow they likewise teach political economy three times per week during the final year. The history of commerce and statistics of industry form in their turn the subject of lectures. Statistics, however, is only treated as a branch of commercial geography. The same plan of studies is followed in a commercial school recently founded at Moscow by the committee of the bourse, under the title of the School of Alexander III.
In the technical schools, properly so called, they give during the next to the last year one lecture per week on political economy and two lectures on commercial geography, including industrial statistics, and the last year applied political economy is taught twice a week in connection with current legislation on commerce and industry. In the secondary agricultural schools during the last two years the students have courses in agricultural economy and legislation.

We will now pass to the higher schools, in which the concrete social sciences are generally taught on a large scale as well in the universities as in the higher special schools (technical, agronomic, juridical, etc.).
In the Russian universities the teaching of political economy goes back to the period of their foundation. In the oldest one, that of Moscow, statistics became the subject of lectures, beginning with the year 1773. The university statute of 1804 placed political economy and statistics among the number of obligatory sciences in the examinations. From that year the teaching of them became the rule. In the first half of the century they taught these sciences in the faculty of philology and history, but since the university statute of 1863 the teaching of them has been done in the faculty of law. According to the modern university statute, that of 1884, these sciences are to be treated in a pretty extensive way. Four hours per week are given to political economy, four hours to finance, two to statistics, four to administrative law, into which applied political economy also enters.

As regards political economy in particular, the professors aim especially to make known its generally received doctrines. The history of these doctrines as well as of the economic régime come second in order. The professor of statistics usually sets forth the history of this science and its method, and teaches demography. In most of the universities, in addition to these lectures required by the regulations, we also find seminars in political economy and statistics, conforming in all respects to the German models.
Some professors of administrative law give so great a development to the economic part of their science that the latter, under their treatment, often acquires the character of a social polity. The personality of the professor has much to do with the mode of expounding all the diverse subjects that form parts of this still badly delimited science. Some give more attention to theory, others to history and political economy. During the last fifteen years there has been created, by the side of the above-mentioned courses, a special course, with which are charged associate professors (they are known in Russia by the German name of privat-docenten). With the aid of such a system we have been able to teach in Moscow one year the history of the economic facts and doctrines of the eighteenth and nineteenth centuries; another year, agricultural economy; a third, industrial economy.

At the University of St. Petersburg they treat in the same way the questions of labor legislation, agricultural economy, economic history, the organization of institutions of credit, the economic history of modern Russia, etc.

Let us now pass to the special higher instruction; the concrete social sciences are also called upon to.form a part of this. Thus, in the school of jurisprudence, established at St. Petersburg, they give during one year two lectures on political economy, two on the science of finance, and three on administrative law (including applied political economy). This schedule is nearly followed by the Military Academy of Jurisprudence, also located at St. Petersburg.

At the Lyceum of Alexander I, at St. Petersburg, political economy is taught four times per week during the first year, administrative law, finance, and statistics also three times, which makes in all eleven economico-social lectures per week. These same scientific disciplines are also taught, though not on so large a scale, in the higher technical schools.

We will cite as an example the schedule of the Agricultural Academy at New Alexandria (in Poland, Government of Liublin): Statistics, two lectures per week during two consecutive years; elements of political economy in their relation to law, three lectures per week during one year; agricultural economy, five lectures per week, also for one year, the last.

At the Polytechnic Institute of St. Petersburg and at the Technical School of Moscow political economy is taught the last year twice a week, while in the polytechnic institutes newly created at Kiew and Charkow the number of lectures is raised to three and political economy is taught at the same time as statistics. The schedule of the agrarian section of these schools also includes three hours of economics and agricultural statistics, with a seminar.

At Warsaw, in the Polytechnic Institute, during the second year four lectures per week are given on political economy and one on statistics.

At Riga, in an analogous school, political economy is taught in all the sections, but especially in that of commerce, in which, besides economic doctrines, they also expound the history of the economic régime, the science of finance, the history of commerce, co nmercial geography, and statistics.

It follows from this brief sketch that great importance is attached in our faculties to the economic sciences. Nevertheless, instruction in them is not up to the level of modern science. Its principal defect is the insufficient number of lectures. In view of the progress made by political economy in our days it is impossible to treat all its aspects in four lectures per week, and that only during a single year. So the profersor finds himself compelled to set forth only the elements of the science. It is impossible for him to treat the history of doctrines otherwise than in a superficial way, or to deal at all with the application of economic laws to the various questions raised by the study of the present condition of agricalture and commerce. In the special schools they give greater extension to these various branches, but for want of time they neglect somewhat the exposition of economic theories.

As to statistics, the same reason prevents the professor from enlarging, as he ought to do, on the requirements of method or of entering upon so vast and so important a problem as that of industrial and agricultural statistics. Moreover, it could not be otherwise so long as the economic sciences are treated only as an appendix to jurisprudence and the technical sciences, when there is urgent need of making them the subject of a special treatment. Political and social economy has made so great an advance that the necessity has arisen of returning, if not to the organization, at least to the guiding idea of the old German faculties known by the name of Facultäten der Cameral Wissenschaften. Lorenz Stein expressed himself on this point nearly twenty-five years ago. He appealed to the government and to the public, urging them to create colleges of the social sciences. The demands of practical life call for some such institutions, the existing educational institutions becoming less and less
capable of giving the desired preparation even to those who will one day be called upon to apply economic laws. How, in fact, can an inspector of factories, a director of a bank, a manager of a railroad company, an agent of a labor, insurance, or public aid society, or an administrator of municipal finances, obtain sufficient preparation in a one year's course, very summary in its character, and rather theoretical than practical, to which, from sheer necessity, the professor must limit himself, giving to it only three or four lectures per week? Thus everything urges us to create new faculties of the social sciences, in which jurisprudence, history, and political science shall be allowed to complete the teaching of economic doctrines and facts.

This report of Professor Tchouprov furnishes a partial explanation of the remarkable activity that has characterized the Russian people in the discussion of social questions. Two of the most influential members of the congress, M. Maxime Kovalersky and M. E. de Roberty, are Russians, though sojourning in Paris, and to that race belong several of the leading contemporary sociologists, among whom might be named Senator Lilienfeld, M. Novicow, M. Michailovsky, and M. Kareieff. The social conditions in Russia are calculated to stimulate thought along these lines, and the institutions of learning, as we have seen, furnish a fairly good basis for bright minds to build upon. As a matter of fact the interest in social questions in Russia is most intense, and while it is highly practical in seeking to use social science as an instrument of reform, the Russians are not specially noted as socialistic agitators, and all the better informed thinkers in that country clearly understand the necessity for a thoroughly scientific treatment of social questions. In this, however, they display a remarkable degree of disinterested zeal, which shows itself in the work alluded to by Professor Tchouprov, of translating foreign works on social science with a view to disseminating ideas on the subject among the masses of the people. Not only do professors and scholars perform this labor with no hope of pecuniary returns, but publishers often incur risk of business losses and other dangers in bringing such translations out.

## England.

It is proverbial that the Anglo-Saxon race is the great representative and embodiment of the spirit of individualism, and it has become the fashion even in France to point to it as the final proof of the superiority of the individualistic régime in the history of civilization. Demolins, a Frenchman, has done more than any other man to emphasize this claim, and he is said to have a large following in his own country. It is natural to infer from this that any form of collectivism must be at a discount in England. Yet those who keep abreast of the social movement there well know that such is not the case, and that as a matter of fact the collective spirit is intensely active there. It does not, however, take the form of theory or figure largely as a social philosophy. Collective action is resorted to only when it has some manifest advantage, and it is that same individualistic spirit that
prompts it which prompts all other action. But it is often so clearly advantageous that it is doubtful whether there is another country in the world where so many enterprises are conducted by state and municipal authority as in the British Isles.

The aversion to theory, however, is probably the cause of the small interest taken in sociology in England. Mr. Herbert Spencer did adopt Comte's name for the science of society, but his system of sociology is exclusively individualistic, and is rejected by the majority of his own countrymen, who have now almost completely emancipated themselves from the power of the Manchester school. But social education can not be said to be recognized in England, and the movement there is rather a practical business affair. Still, as we shall see, there are those who actively advocate and are striving to bring about a more methodical system through social training.

Five reports on social education in England and one for Ireland were presented to the congress, but all but one of these deal with some special aspect of the question. Mr. Ernest Aves, who limits his report to the work of Toynbee Hall, happily disposes of the proposition to make a report on popular social education in England by comparing it to the celebrated report on the snakes of Iceland-"There are none." Sir W. de W. Abney treats wholly of technical education. Mr. J. CobdenSanderson discusses the movement of "Arts and crafts," and Mr. Sidney Webb, the well-known and avowed socialist, and member of the London county council, discourses on the "Development of commercial education in London." Mr. Horace Plunkett has a report on technical education in Ireland.

## REPOR' OF MR. SADLER.

Only in the report of Mr. Michael Sadler, on the "Social sciences in the English secondary schools," do we find any such general survey of the field as those that have been considered for the various continental countries. We will therefore first examine this report. It consists largely of discussions of certain questions, and many of the facts are furnished by others, especially in the several appendices. The problems discussed will be admitted to be important, and the report furnishes some information relative to the attitude of the universities with regard to social instruction. The subject is divided into twelve general heads, more or less connected and logically arranged, as follows:

Report on the teaching of social sciences in Engiish secondary schools, by M. E. Sadler.

1. In England there is no uniformity in secondary education. The state does not issue programmes of instruction to be followed in all public secondary schools. Consequently, among these schools there is great variety of type, and no strict uniformity either in the subjects which they teach or in their methods of teaching. It is unsafe, therefore, to generalize about English secondary education. No general statement applies to all the schools. Different institutions differ in their curricula and in their point of view. This report is confined to a brief description of the usual practice as
regards instruction in the social sciences. Reference will also be made to certain noteworthy exceptions.
2. In the first place, however, it is necessary to define what is meant by the social sciences. On this subject there is serious difference of opinion. Some would understand by the term little beyond the doctrines of political economy, but by others the expression is understood in a wider sense, viz: As embracing ethics; political philosophy; those "generalizations of biology and psychology" which, in Mr. Herbert Spencer's words, are necessary to "the rational interpretation of social phenomena;" economic history and theory; the history of social and national development; literature, art, etc., in their bearing on ideals of life; the study of the machinery and methods of central and local government, and of the duties of citizenship.
3. Few boys or girls remain in a secondary scheol after their nineteenth birthday. Most of them leave school at a much earlier age. It is obvious, therefore, that during their school days they can not make any advanced or systematic study of the social sciences. Their experience of life is too limited. Their judgment is too immature. They would be either repelled'by untimely disquisitions on subjects which they were too young to comprehend, or unduly influenced by the (possibly erroneous) general ideas of some admired teacher. Nor, even if the pupils were old enough for the advanced study of social sciences, would there be time for such study, at any rate under the conditions which at present determine the curricula of English secondary schools.

But, on the other hand, it is quite possible within the ordinary limits of secondary education to interest boys and girls in a general way in some of the problems of social science, to suggest points of view, to point out subjects for later study, and even (within rather narrow limits) to impart some detailed information on certain parts of the subject. And nearly every intelligent pupil leaves a secondary school with some habitual attitude of mind toward social questions. But how far that attitude of mind is the result of the presence or absence of social science teaching as a formal part of the curriculum is very doubtful. To the present writer it appears that much more depends on the tone of the school, the temperament of the individual pupil, and the drift of the social philosophy of the time than on set lessons on social science. Nor must it be forgotten that on impressionable minds one-sided instruction on matters of ethical or social controversy is apt to produce a repellent effect and even to produce violent reaction.
4. In his Memoirs of a Revolutionist, Prince Kropotkin speaks of the importance of having, among other teachers in a school, one at any rate who, instead of narrowly confining himself within the limits of a particular subject, is free, in the course of his instruction, to "bind together the separate historical and humanitarian sciences, to unify them by a broad philosophical and humane conception, and to awaken higher ideas in the brains and hearts of young people." Prince Kropotkin proceeds to argue that "the same thing ought to be done for the natural sciences as well. It is not enough to teach physics and chemistry, astronomy and meteorology, zoology and botany. The philosophy of all the natural sciences, a general view of nature as a whole, must be conveyed to the pupils, whatsoever may be the extension given to the study of natural science in the school. The philosophy and the poetry of nature, the methods of all the exact sciences, and an inspiring conception of the life of nature must make part of education."

In such an ideal discipline some introduction to the social sciences would naturally find a place. But there are few secondary schools in England where the different parts of the curriculum are fused into one great intellectual and moral synthesis in such a manner as Prince Kropotkin describes. It is doubtful, indeed, whether in the present state of our knowledge there would be, except among the members of certain religious bodies or among families closely bound to one another by common social
and ethical sympathies, sufficient agreement upon fundamental principles of faith and conduct to allow, in the curriculum of an ordinary secondary school, any such dominant and commanding synthesis of intellectual and moral ideas.

Perhaps this lack of synthesis among the ideas which are involved in the subjectmatter of education is a more serious matter than is generally recognized. To the present writer it seems to be one of the chief causes of a certain decline in intellectual interest which has been remarked by many experienced observers in English higher secondary schools. But he would attribute it to causes beyond our control, and is far from thinking that it can be artificially remedied by formulating a number of general propositions and teaching them, however eloquently, to boys and girls at school. Spiritus ubi vult spirat.

Yet it would be an unfortunate result of the transitional character of so much contemporary thought on ethical and social problems if masters and mistresses in secondary schools were to shrink from communicating to their pupils general ideas as to the aims and conduct of life under modern conditions of scientific inquiry and religious belief. There are some observers who maintain that "at present the greatest and most dangerous error of some English secondary schoolmasters is that they too narrowly center their efforts on the boy in order to make him morally, physically, and intellectually satisfactory at school and to enable him to pass his various mental examinations on leaving school." (C.C. Cotterill on the "Prospective character of school training," in Thirteen Essays on Education, p. 147.) This view, however, does not seem to be generally held, and the usual opinion is rather in favor of not trying to set young people thinking too soon about the problems of adult life. But the present writer would submit that the interest taken by boys and girls at school in political and social questions depends far less on what their schoolmasters and schoolmistresses say or avoid saying than on the currents of social enthusiasm or social despondency which happen to be running at the time in the larger world outside the school walls.
5. But, apart from more ambitious plans, can anything be done, under present conditions, to impart to boys and girls in secondary schools clearer and more consistent ideas about social economy and the functions of central and local government? On this point there are signs of much difference of opinion. Some headmasters and headmistresses are strongly in favor of making, in this more limited sense, social science teaching a carefully organized part of the secondary school curriculum. On the other hand, many experienced teachers shrink from the undertaking because they hold that we are far from being really agreed as to the principles which necessarily underlie any order of society, and that there are objections to our preoccupying the minds of young pupils with theories which must involve, though they may conceal, much that is both economically and ethically disputable. Such teachers would argue as follows: "Our pupils, it is true, may have to live out their lives under the conditions imposed on all individual citizens by political democracy and by the capitalistic organization of industry. But it would appear that both the one and the other are in the stage of rapid development and transition. Is it expedient, therefore, in the interests of my individual pupils or of the country as a whole, that I should impart at school instruction on economic or political subjects in a manner which would imply either (1) the permanence of a social organization which I may personally believe to be transitory or (2) doubt as to the wisdom of arrangements in which more experienced persons than myself appear to acquiesce, or (3) the immorality and injustice of social conditions with which the parents of my pupils are obviously content? Is it not better for me to confine my efforts to grounding my pupils in branches of knowledge about which there is no such dispute, and thus try to form their judgments and sympathies by means of a less controversial discipline, so as to enable them to face life bravely and honestly, and to make up their own minds sagaciously and independently about its deeper problems?"

Whatever be the reason, the fact remains that there are comparatively few secondary schools in England where political economy or "civics" forms a separate and important part of the organized curriculum.

In the Cambridge University local examination a paper is set on political economy for those pupils who desire to take up that subject. In the Oxford University local examination papers are set (1) on politics and (2) on political economy. These examinations are very largely used by secondary schools for boys and girls. In Appendix I to this report will be found specimen examination papers set on politics and political economy in these examinations.

In the Oxford University local examination for senior candidates the regulations, defining the scope of the paper in political economy, require candidates to "possess a general knowledge of economic theory as it relates to the (1) production, (2) distribution, (3) exchange, (4) consumption of wealth, and (5) the economic functions of government. An acquaintance should be shown, under (1) with the laws of diminishing and increasing returns, the theory of population, the principle of the division of labor, and the origin and growth of capital; under (2) with the theories of rent, interest, pronit, and wages; under (3) with the outlines of the theory of value and its application to international trade, the functions of money and the operation of banking and credit; under (5) with the rules and incidents of taxation, and the aims and difficulties of socialism. Candidates are also required to show some knowledge of existing economic conditions."

In the same examination (i. e., for senior candidates) candidates may offer to be examined in elementary politics as treated in Lewis's work On the Use and Abuse of some Political Terms.

To this Oxford senior local examination persons of either sex are admitted without limit of age; but no one born before July 1, 1881, is eligible for honors or distinction in the examination to be held in the present year (1900).

In the Oxford local examination for junior candidates (open to persons of either sex without limit of age on the condition that no candidate born before July 1, 1884, is eligible for honors or distinction in the examination to be held in the present year) candidates may offer to be examined in elementary politics as treated in Strachey's Industrial and Social Life and the Empire.

The following statistics show that the above-mentioned subjects are not taken up to any considerable extent:

## Oxford local examinations.

> (1)

FOR SENIOR CANDIDATES.
(a) In politics.
1898.
1899.

Examined ................................... 15
Passed........................................... 10

10
(b) In political cconomy.
1898.

Examined
Passed . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 66

Total number of senior candidates who obtained certificates in the Oxford local examinations in above years:
$\qquad$
1899
1,281

Oxford local examinations-Continued.
(2) FOR JUNIOR CANDIDATES IN ELEMENTARY POLITICS.
1898.

Examined ............................... 44 Examined .-................................. 36

Total number of junior candidates who obtained certificates in the Oxford local examinations in the above years:
$\qquad$
1899 3,037

Cambridge University local examinations for senior candidates in political economy.
Number of candidates:


Total number of candidates presenting themselves for Cambridge University senior local examinations in the above years:


In papers set on other subjects in the above and similar examinations, and in the Oxford and Cambridge school examinations, there sometimes occur individual questions which touch on some aspects of social science. A selection from these questions is given in the appendix to this report.
6. In an appendix to this report will be found the syllabus of social-science teaching followed at the William Ellis Secondary School for Boys, Gospel Oak, London, N. W. This syllabus is especially interesting to the student of the subject, because the founder of the school, Mr. William Ellis (born 1800, died 1881), was an earnest advocate of making instruction in social science a necessary part of school work. In one of his books Mr. Ellis thus defined his aim in education: "By education, I mean an earnest application of well-selected means to impart to all such a knowledge of the laws of the universe, especially of their practical bearing upon the daily wants and business of life, as that all may be clearly convinced that their happiness is only to be attained by placing themselves in harmony with those laws; to communicate to all such manual, muscular, and intellectual dexterity as may qualify them to gain, extend, and improve their knowledge and appropriate and apply it; and also to implant those habits of observation, application, and forethought, without which the soundest intellectual acquirements are comparatively useless. Such a course of education, persevered in generation after generation, would raise up a people knowing and practicing the duties of social life, laboring and economizing for their own present and future maintenance, and struggling and contriving for the benefit of all. A. people so educated would be inspired, not with the mere vulgar notion of getting on, not with the vain and illusory desire of rising in the world, but with a solemn sense of the sacredness of every duty undertaken, of every contract entered into. And thus the desire of happiness and gratification, the motive force of our conduct and exertions, would be subjugated and regulated by an all-pervading sense of duty, and thereby be rendered more capable of gaining its end." (Quoted in E. K. Blyth's Life of William Ellis, p. 74.)
Writing in 1859 to the Duke of Newcastle's commission on popular education, Mr. Ellis urged that school children should be instructed in "the phenomena of industrial life and the conditions of industrial success," and made "thoroughly acquainted with (1) the sources of wealth-industry, knowledge, skill, and economy; (2) the
connection between capital and labor, the reciprocal duties of employer and employed, master and servant, and the circumstances which determine the rates of wages and profits; (3) the importance of the respect for property and the necessity of government and laws for enforcing this respect where not otherwise sufficiently felt; (4) the advantages of division of labor and the new responsibilities incurred by its adoption, the causes and consequences of fluctuations of value, and the more urgent call for integrity, perseverance, punctuality, order, and forbearance to allow all the operations of interchange to be satisfactorily conducted; (5) the uses of money; the causes and consequences of fluctuations of prices and wages; the suicidal folly of opposing prices in harmony with supplies actual and contingent; of organizing combinations, strikes, and turn-outs; of impeding the introduction of machinery and of other improved methods of production, and the free flow of capital and labor from one trade district and country to others where a more profitable employment for them is expected; (6) the use of credit in distributing capital and placing it under the control of those most competent to employ it; the functions of banks and bankers; the new responsibility incurred by the use of credit; the causes of bankruptcies, commercial panics, and stoppage of works, and the precautions through which the suffering from these calamities may be mitigated." (E. K. Blyth, op. cit., p. 20t.)

In the history of English education in this century Mr. William Ellis may be said to have been the apostle of instruction in social science in a special sense. To the advocacy of its claims and to the practical application of his principles he devoted great abilities, large means, and unwearying patience. He had a profound admiration for the political economy of James Mill, and was deeply influenced by the philosophy of Bentham. But, as his biographer remarks, "social economy, as developed by Ellis, is a union of the principles of political economy, as understond by his predecessors, with those of morals and religion. Its purpose is to instill motives of action, adapted to the phenomena of existing society, such as can alone effect permanent improvement in the welfare of the people." (Blyth, op. cit., p. 127.)

By the courtesy of the head master, Mr. Cumberland, I am able to print in an appendix to this report the plan for teaching social science, now practiced at the secondary school which bears William Ellis's name.

At University College School, Gower street, London, W. C., classes in social science were founded in 1858 at the instance of William Ellis. In these classes were explained "the elementary doctrines of political economy in the widest sense of the word, as it bears not only on the production and distribution of wealth, but also on the conditions of industrial success and social happiness and on the practical duties of each individual toward others." ${ }^{1}$ The head master of University College School, Mr. J. L. Paton, tells me that the classes still continue, but that, of later years, they have had no special syllabus. The text-books in use are: (1) For juniors, Mrs. Fawcett's Political Economy; S. Jevons's Primer of Political Economy, (2) For seniors, A. Marshall's Economics of Industry; F. Walker's Political Economy.
7. At the North London Collegiate School for Girls, Sandall Road, N. W., instruction is given in civics (central and local government), in the theory of demand and supply, and in economic history. By the kindness of the head mistress, Mrs. Bryant, D. Sc., I am able to print in the appendix to this report three of the syllabuses of these courses of instruction. Mrs. Bryant informs me that the lessons are of a very simple character, and are given in certain classes, no two in the same class, once a year. The courses on central govermment and local government are taken in alternate years.

At the Manchester High School for Girls the head mistress, Miss Burstall, writes to me that civics is taught in a course similar to those in use at the North London

[^49]Collegiate School. Central government is taken one year and local government the next.
8. There are many other secondary schools, both for boys and girls, in which political economy and civies are taught in all the higher classes as a regular part of the curriculum, but it is unnecessary for me to add to the illustrations given above.

I am indebted, however, to Mr. H. Bompas Smith, head master of Queen Mary's School, Walsall, for the following observations, based on his personal experience in teaching social science in a secondary school. They indicate in a striking manner the advantage of making instruction in economic subjects part of the regular curriculum of secondary schools, especially in industrial districts. I would call attention to the cautious spirit with which Mr. Bompas Smith deals with such disputed questions as strikes, in contrast to the more dogmatic and ex parte manner in which (at a much earlier stage in the development of economic science) Mr. William Ellis referred to similar problems in a passage quoted above.
"THE TEACHING OF SOCIAL SCIENCE AT QUEEN MARY'S SCHOOL, WALSALL.
"The object kept in view is (1) to cultivate an interest in the social movements of the day and (2) to give some insight into the general principles of commerce.
"A short text-book of political economy is taken as a basis and supplemented by oral explanations and expositions of differing views, while the boys are encouraged to read selected portions of other authors and are frequently given questions to answer in writing at home.
"It is found that boys of 17 take a keen interest in the subject, which would seem a valuable one for boys leaving school at about that age, especially if intended for a commercial career.
"Three points may perhaps be mentioned:
"(1) It is desirable to illustrate constantly by references to local conditions and local trade, thus connecting theory with concrete facts.
"(2) When a boy has begun to grasp the subject, his reading should be wide enough for him to be able to compare differences of statement, but should at first be confined to a few important points, otherwise he will be apt to get bewildered.
"(3) Disputed questions, e. g., socialism, strikes, bimetallism, will constantly arise. Here the method adopted has been to begin by stating any known facts bearing on the point and then to state as impartially as possible the opposing views. The master's opinion is given as one among others. The boy thus comes to see the possibility of conscientious disagreement and the necessity of some day deciding for himself which side of the truth he will embrace."
9. But, apart from the certainly increasing number of cases in which political economy and civics are regularly taught as class subjects, it should be remembered that in nearly every secondary school in England some measure of instruction in social science is given either to individual pupils or incidentally in the course of class lessons in history (classical or modern), geography, or other subjects. How much this will come to depends on circumstances, i. e., on the special interests of the teacher, or the nature of the subject, or the special aptitudes or aim of the pupil.

In order to remove a prevalent misconception, it may be pointed out here that a classical education, as understood at the great secondary schools in England, is far from precluding constant and useful parallels or contrasts being drawn between the political, social, and economic conditions of the ancient and the modern world. An efficient schoolmaster, when taking his pupils in Thucydides or Cicero or Tacitus, will find many opportunities of stimulating their political interest and steadying their political judgment. Dr. Arnold, of Rugby, was always very careful to avoid allusion to his own political principles in the course of his school lessons, and it was only on rare occasions that his subjects for essay composition touched on topics involving
disputed points in party politics. ${ }^{1}$ His aim was to enable his pupils to form an independent judgment for themselves, and to appreciate moral agreement amidst much intellectual difference. But Dr. Arnold was a strenuous advocate of classical education in its more liberal sense, because in the classical authors "with a perfect abstraction from those particular names and associations which are forever biasing our judgment in modern instances, the great principles of all political questions, whether civil or ecclesiastical, are perfectly discussed and illustrated with entire freedom, with most attractive eloquence and with profoundest wisdom." ${ }^{2}$
In many of the great public schools boys may read, as special subjects, bookson political economy or on some branch of social science. Again, in the higher classes, subjects of social interest are often set for English essay compositions. Similar subjects frequently arise in the course of lessons on modern English literature. Again, debating societies and essay societies are a feature of all English secondary schools, and at their meetings discussions take place on a great variety of social, political, and economic subjects.

Nor should it be forgotten that, though ethics is rarely included under that name as a definite subject in the curriculum, there are hardly any English secondary schools in which the Old and New Testaments are not studied, or in which simple discourses on life and duty, addressed by the head master or head mistress to the assembled school, are not made the means of imparting much ethical instruction in an undogmatic but impressive form. Nor will students of English secondary education need to be reminded how essentially important a part of Dr. Arnold's educational work were the sermons which he preached to the Rugby boys in the school chapel. From the autumn of 1831 to the end of his life in 1842, he preached almost every Sunday of the school year. "Even the mere readers of his sermons," wrote his biographer, Dean Stanley, "will derive from them the history of his whole mind and of his whole management of the school. But to his hearers it was more than this. It was the man himself, there more than in in any other place, concentrating all his various faculties and feelings on one sole object, combating face to face the evil with which directly or indirectly he was elsewhere perpetually struggling. He was not the preacher or the clergyman who had left behind all his usual thoughts and occupations as soon as he had ascended the pulpit. He was still the scholar, the historian, and theologian, basing all that he said, not indeed ostensibly but consciously and often visibly, on the deepest principles of the past and present. He was still the instructor and the schoolmaster, only teaching and educating with increased solemnity and energy. He was still the simple-hearted and earnest man laboring to win others to share his own personal feelings of disgust at sin and love of goodness, and to trust to the same faith in which he hoped to live and die himself. It is difficult to describe, without seeming to exaggerate, the attention with which he was heard by all above the very youngest boys." ${ }^{3}$

And the place held by the school chapel in the thoughts of some English public school men of the present day is nobly described in a recent poem by Mr. Henry Newbolt, called "Clifton Chapel." A father is supposed to be bringing his son as a new boy to his old school, and they stand together in the chapel.

[^50]To set the cause above renown, To love the game beyond the prize, To honor, while you strike him down, The foe that comes with fearless eyes, To count the life of battle good, And dear the land that gave you birth, And dearer yet the brotherhood That binds the brave of all the carth.

My son, the oath is yours; the end Is His, who built the world of strife, Who gave His children pain for friend And death for surest hope of life. To-day and here's the fight begun, Of the great fellowship you're free; Henceforth the school and you are one, And what you are, the race shall be.
10. All the greatest secondary schools in England support a mission in some poor district of a large city. This personal tie between the school and some needy district is the means of interesting many of the boys in social problems and of giving some of them an opportunity of becoming personally acquainted with the conditions of the district in which the mission is situated. There is often a similar association between a girls' school and some branch of social work in a great city. In many schools the girls are instructed in the methods of wise social and charitable work.
11. Though there are no statistics on the subject, it seems probable that instruction in some rather limited but practically important branches of social science is being given in an increasing number of English secondary schools for boys and girls. There is a distinct tendency to pay more attention to social subjects in the curriculum, but an evident unwillingness (and perhaps, owing to the requirements of examinations and other reasons, an inability) to make such instruction, as a rule, anything more than tentative, incidental, or exceptional. Where economics and social subjects are touched on, great care is taken to avoid issues of political or social controversy, or, when allusion must be made to such subjects, to deal with them in a dispassionate spirit. It should not be forgotten that many of the most celebrated of English secondary schools are boarding schools, and that the chief aim of English secondary education has always been not the imparting of knowledge, but the formation of character. One of the most famous of English head masters, Mr. Thring, wrote in 1867, "Formation of character and a right spirit are only in a very slight degree capable of being made a matter of imparted knowledge. Boys or men become brave and hardy and true, not by being told to be so, but by being nurtured in a brave and hardy and true way, surrounded with objects likely to excite these feelings, exercised in a manner calculated to draw them out unconsciously. For all true feeling is unconscious in proportion to its perfection." ${ }_{1}$

Now, it is obvious that this view of education implies a social and ethical ideal. But in the best English secondary education the social and ethical ideal is implicit in the tradition of the community-a tradition in which new elements are constantly being interwoven with the old-rather than explicitly taught by teachers in set lessons. In fact, the strength and vitality of the tradition may be measured by the absence of any felt need for directly imparted instruction. But it will be generally agreed that the tradition is often usefully supplemented or corrected, not only by sermons and addresses on ethical subjects and in friendly talks between masters and pupils-a very important element in the education given at English secondary schools-but by direct class teaching or individual instruction in economic and social problems. There is, however, in some minds at the present time a sense of

[^51]uncertainty and hesitation in regard to some of the fundamental problems of social welfare which may for a season impede the rapid development of social science teaching in secondary schools. The laws of human progress and the principles of social economy are seen to be far less simple matters than was the opinion of many progressive thinkers sixty years ago. The problem is seen to be very complex and full of subtle elements, spiritual as well as economic or material. And there is a distinct tendency in England to stand in the old ways for a time, until the path lies clearer ahead. Still more striking is the revolt against the more materialistic forms of social philosophy.

But the prevailing tone of English thought on these subjects is, as has been truly said, "Left center." Not revolutionary enthusiasm nor reaction, but témperate and cautious progress is likely to mark English thought on social questions, and the same characteristic will probably distinguish the instruction given on those questions in English secondary schools. But it is unlikely that instruction in political economy and kindred subjects will ever play more than an extremely subordinate part in the ordinary curriculum of our secondary schools. Exceptional boys, or boys in exceptional circumstances, may learn much of these subjects, but the ordinary English parents and schoolmasters are likely to agree with Dr. Arnold in thinking that "the absence of all instruction in politics or political economy, nay, even an absolute erroneousness of judgment on such matters, previded always that it involves no wrong principle in morality, are comparatively of slight importance. Let the boy gain, if possible, a strong appetite for knowledge to begin with; it is a later part of education which should enable him to pursue it sensibly, and to make it when obtained, wisdom. . . . It is no wisdom to make boys prodigies of information; but it is our wisdom and our duty to cultivate their faculties each in its season, . . . to furnish them with the means and to excite the desire of improving themselves, and to wait with confidence God's blessing on the result." ${ }^{1}$
12. It would be unfortunate if, through the instruction given under the title of "social science" being confined to lessons in the elements of economic theory and of industrial history and to abridged descriptions of the institutions of local and central goverument, the minds of boys and girls at an impressionable age were accustomed to regard purely economic or commercial forces and motives as furnishing the cbief (or the only necessary) key to the problems of social development. Little good would be done by forms of instruction tending to throw into false perspective the spiritual, the self-seeking, and the material, elements in the development either of nations or of the individuals out of which nations are made. Better use can be made of the few years devoted to secondary education than by attempting to preoccupy the minds of young people with doctrinaire generalizations about human society or to load them with masses of facts about commercial life and the devices of civil govermment. Those are not the most likely best to serve their country and their generation who have been taught at school to think about the mere machinery of administration instead of about the true aims and duties of government, and to conceive the chief end of life to be the seeking of wealth rather than the doing of duty. In this, as in all the higher parts of education, nearly everything depends on the moral aims, the intellectual insight, and the personal example of the teacher. Corruptio optimi pessima.

[^52]
## APPENDIX I.

University of Cambridge.<br>Local examinations (seniors), 1897.

POLITICAL ECONOMY゙.

1. Is the total wealth of a community altered by exchanges among the members of the community of the useful articles in their possession? For example, if a carpenter supplies a table to a farmer in exchange for milk and butter, will the total wealth of these two be changed by the operation?

Is it necessary that one of the two parties to such an exchange as that named should lose in order that the otber may gain?
2. Explain the connection between the cost of production of a commodity and its value in exchange. Would it be correct to say that the price of a concert programme represents its expenses of production?
3. Distinguish between real and nominal wages. Does the rate of wages fairly represent the cost of labor to the employer?

Give some reasons why the wages paid in different places for the same class of labor differ.
4. Give a definition or explanation of what is meant by the term "capital."

What are the chief influences which affect the increase of capital? Indicate which of these are more, and which less influential now than formerly.
5. Explain what is meant by the law of diminishing returns as applied to land.

Comparing the amount of wheat (or other crops) raised on an acre of land in England in recent years with the crops of former times, it is clear that English land has given a larger average return per acre from generation to generation. How would you reconcile this with the law stated, or would you regard it as a contradiction of the law?
6. What is meant by saying that certain kinds of money are "legal tender?" Illustrate, from the English currency, the difference between money which is and money which is not legal tender.
7. In what different ways may a country pay for the goods it imports from other countries?

Examine the contention that the fact that the United Kingdom has for many years imported a greater value of goods than she has exported proves that she is getting into debt to the rest of the worlid.
8. Give, verbatim or in substance, that one of Adam Smith's so-called canons of taxation which lays down the principle of justice in taxation.

Criticise the justice of a tax proportional to the income of each taxpayer with the following modifications (as in the British income tax), namely: Incomes not exceeding $£ 400$ pay only on the excess above $£ 160$; and incomes between $£ 400$ and $£ 500$ pay only on the excess above $£ 100$.

Local examinations (seniors), 1898.
POLITICAL ECONOMY.

1. Explain and illustrate the meanings of the terms "personal wealth," "auxiliary capital," "consumption goods." With what other terms are these terms respectively specially contrasted?
2. Give an illustration showing that the utility of a given quantity of a commodity varies according to the total amount of it already possessed.

Explain the relation between the utility of a commodity and the price that people are willing to pay for it.
3. What processes are included in the production of wealth, and what are the chief agents of production?
Explain why some things are sold more cheaply and other things less cheaply when they are produced in larger quantities.
4. Distinguish the elements included in the profits of business. How far is it true that the rate of profits in different businesses at any time tends to equality?
5. In estimating the economic well-being of a class of laborers, what are the chief data required besides a knowledge of their money wages?
6. Distinguish the different functions of money. How does credit operate as a substitute for money?
7. Explain the advantages of foreign trade.
8. What would probably be the effects of a tax levied on the owners of agricultural land in proportion to their rent?

What would be the differences in the effects (a) according as the owners did or did not contribute any of the capital expenses of farming; (b) according as the rent of building ground was or was not exempt from the tax?

## Oxford local examinations (seniors), 1898.

## elementary politics.

1. What does Seeley conceive to be (a) the subject-matter, (b) the aim, of the science of politics?
2. State and criticise Seeley's classification of the different forms of the State.
3. What does Seeley say respecting the influence which the foreign relations of a State exercise upon its constitution? Give historical illustrations of your answer.
4. Explain precisely the distinction between organic and inorganic States.
5. "The minister is not the servant of Parliament, but its King. He does not carry into effect the wishes of others, but his own wishes." Explain this statement, and consider how far it is true of governments at the present day.
6. In some states the power that supports the government is latent and has no organ. In the other class of states the power that makes the government has an organ through which it can act with regularity and legal formality. Explain and illustrate this statement.
7. What is the original meaning of the term "aristocracy?" Account for the evil associations which it has acquired.

QUESTIONS FROM VARIOUS PApERS BEARING ON sOME ASPECTS of social sCience.

1. Write an essay on "Patriotism."
2. Write an essay on "England in 1837 and 1897."
3. Write an essay on "Newspapers."
4. Explain and comment on the words of Burke, "The fierce spirit of liberty is stronger in the English colonies probably than in any other people of the earth."
5 . What were the abuses corrected by the reform bill of 1832 ?
5. What does the history of South Africa tell us as to the advantages and disadvantages of a chartered company?
6. Explain why the Cape in Dutch hands never expanded beyond a small settlement.
7. Describe the extent and importance of the woolen industry in England, explaining where the chief centers are, whence the raw material is obtained, and to what countries it is chiefly sent in its manufactured state.
8. For what reasons are the British colonies in South Africa on the whole well suited for European colonization?
9. Where are the chief shipbuilding yards of the United Kingdom?
10. What do you know of (a) the usury laws; (b) Malthus; (c) Christian socialism?
11. Compare the respective advantages and drawbacks of trade unions and cooperation as agencies for improving the economic position of the working classes.
12. State and explain the law of diminishing returns. What is its bearing on other economic theories and on practice?
13. Explain the following: (a) "Man is of all sorts of luggage the most difficult to be transported." (Adam Smith.) (b) "Value depends wholly on the relation between demand and supply." (Walker.) (c) "The capitalist is the motive power in modern production." (Bagehot.)
14. Explain the following terms: "Wages fund;" "incidence of taxation;" "free trade;" "peasant proprietorship."
15. Illustrate from Thucydides Book II the value of sea power in the Greek world.

## APPENDIX II.

THE PLAN FOR TEACHING SOC1AL SC1ENCE AS CARRIED OUT IN THE WILLIAM ELLIS ENDOWED SECONDARY SOHOOL FOR BOYS, GOSPEL OAK, LONDON, N. W.

In drawing up and submitting the following I do not suggest that I have attempted to improve upon Ellis's Progressive Lessons, but merely that I have grouped and arranged them so as by the light of experience to make them effective.

With a view to making these already concrete lessons still more concrete, I have always associated them wherever possible with the instruction given in natural science, history, and geography. For instance, lesson 36 on standards (and units) permits of ample illustration drawn from physics and chemistry; similarly lesson 83 as to the laws of the universe. Lesson 30 on interchange is studied with the help of maps and geography books, while many of the lessons receive ample illustration from the history of this country, and would receive still more if the text-books were less crowded with incidents of the utmost insignificance.

I have found it very helpful to begin with a series of lessons to show that while there is in or on the earth all that is needed for the physical support and development of man it is of no service to him without work. And the same of the faculties of mankind; they contain all that is needed in whatever directions they are capable of development, but here again labor is indispensable. Starting with the absolute need for human labor in human interests we pass to the association of workers and their consequent mutual dependence. The boys' knowledge of history and geography shows them how this association and dependence has widened until it has become international. (Lessons 1 to $8,14,20,29,32,69$.) As the result of work follow wealth and property with the various problems associated with them $(9,10,11,12$, $13,15,16,17,26,79,80,66,67,68,70$ ). The constant using up of wealth shows the need for its equally constant production, and brings on the subject of capital (18, 19, $23,25,27,39,45,46,60,63)$ and of labor ( $20,21,24,29,30,40,42,64,65$ ).

Labor suggests wages and salaries ( $17,21,24,25,59$ ).
To me it has seemed both difficult and unnecessary to strive after logical sequence when this point has been reached, but I generally take the following subjects more or less in the order given: Commodities, 35, etc.; supply and demand, $34,35,43,44$; standards, 36 ; prices, 38,31 ; value, 33 ; profits, $23,24,25,27$; wholesale and retail, 41 ; rent, 27,28 ; interchange, $30,31,40,41,42,43,44$; money, $37,50,52,54,57$; credit, 48 , $49,50,51,54,57$; rate of exchange, 52 ; interest, $61,62,64$; import and export, 52,53 ; emigration and immigration, $63,43,44$; insurance, 53 ; taxation, $71,72,73,74,75,76$.

It is impossible to give lessons on the above with any desire to observe the spirit of Ellis's work as set forth in the Introduction to the Progressive Lessons without the constant appeal to the ethical side of them, but I have found it profitable to keep to the higher forms of boys the systematic study of the purely ethical lessons, such
as those on destitution and its relief, $56,57,68$; government, $71,95,98,100$; law, 83,84 , $96,97,99$; education, 12,82 ; conduct.

Side by side with these ethical lessons I have, in the case of boys from 15 to 17, tried to find as much time as possible for close matter-of-fact treatment of questions in political economy.

E. B. Cumberland, Head Master.

March, 1900.

APPENDIX III.<br>North London Collegiate School for Girls.

## Syllabus of twelve lessons on the theory of demand and supply.

1. Some fundamental notions: Desire and effort; utility and disutility; wants in relatiou to activities; goods and their classification; wealth; consumption and production; demand and supply.
2. Limitation of wants; diminishing utility with increasing quality of goods; measure of utility by demand price; demand schedules and diagrams; total utility; marginal increment demanded; marginal utility; elasticity of demand.
3. Wants supplied by efforts to supply them, and also by abstinence, or the postponement of satisfaction; case of one man supplying his own wants; Robinson Crusoe taking stores from the wreek; increasing disutility of effort and abstinence; measure of disutility by supply price; total disutility; marginal increment supplied; marginal disutility lost; supply schedules and diagrams.
4. Exchange; use of money in exchange; case of buying and selling between one producer and one consumer; divisible and indivisible commodities; in former case, that quantity sold at which supply price and demand price are equal; markets and market price; comparison of market trade with simple exchanges.
5. Illustration of corn market or butter market in a country town; temporary equilibrium of demand and supply; sources of supply behind market, and transition from market to normal price; cost of production; expenses of production.
6. Analysis of expenses of production, illustrations: Beef, honey, bread, cloth, bicycles. Requisites of production: Land, capital, labor, including all the varieties of ability required.
7. Fertility of land; diminishing return of land to successive "doses" of labor and capital; marginal dose; marginal return; margin of cultivation; surplus produce; rent.
8. Supply of capital; growth of wealth; sources of accumulation; motives to saring; influence on saving of changes in the rate of interest.
9. Supply of labor; growth of numbers; health and strength; skill; intelligence; character; wholesome conditions of lie and industrial training.
10. Industrial organization; division of labor; specializatioin of skill and machinery; development of the arts of production; production on a large scale; business management.
11. "Man's power of production increases with the volume of the work that he does;" increasing returns to labor and capital; the joint effect of the laws of increasing and diminishing return; illustrations of normal supply schedules; normal equilibrium of demand and supply; equilibrium price; diagram; consumers' rent.
12. Revision and further application of principles if time permits.

## Syllabus of twelve lessons on economic history.

I. Meaning of term "economic history;" division into periods. Period I (to 1066): Effects of immigrations of English, Danes, and Normans; Roman missionaries; Flemings; consolidation of nation; extension of trade.
II. Period II (1066 to 1216): Domesday Book; origin of manors; their organization; connection with parochial and municipal life; towns in Domesday; their fiscal responsibility; jurisdiction.
III. Towns and guilds; trade and its restrictions; merchant and craft guilds, their origin, uses, and abuses.
IV. Period III (1216 to 1500): State of agriculture and its importance in Mediæval England; rise of wage-earning, rent-paying class; some examples of prices.
V. Trade and manufactures; wool trade, its political and social importance; English manufactures; influence of guilds on trade; their decay.
VI. Period IV ( 1500 to 1760) : Economic changes; inclosures; dissolution of monasteries; decline of agriculture; sheep farming; agriculture in seventeenth and eighteenth centuries.
VII. Growth of foreign trade; commerce and war; war and prices; colonial trade.
VIII. Period V (1760): The industrial revolution; great inventions; growth of great cities; factory system; factory legislation and the need for it.
IX. Modern agriculture; effects of corn laws; growth of foreign possessions.

X . History of one or more of our great companies or gilds.
XI. Our banking system; its origin; Lombard street and the Bank of England.

[^53]The above report touches the subject of higher education only in so far as the Oxford and Cambridge examinations of which it treats may be thus classed, but these are open to all, and are, as Mr. Sadler states, largely utilized by students of both sexes from the secondary schools. No report was presented to the congress on the teaching of political economy, political science, ethics, and other social science branches in these or the Scotch universities, although these branches, are, of course, very searchingly prosecuted in Britain.

But to England is due the credit of inaugurating an entirely different social science movement in education, which has beén vigorously conducted there and has been transplanted in the United States. It is also taking root in some continental countries. I refer to what is known as "university extension." It is to be regretted that the congress was unable to secure the services of some competent representative of that movement to prepare a general report upon it.

Closely associated with the university extension movement, however, is another which has its seat in England, but has never to my knowledge received a specific designation. It consists in a more humanitarian application of university extension in the interests of the lower classes, and is the outgrowth of the form of socialism represented by Ruskin and Willian Morris. One of its most typical and practical representatives was the lamented Toynbee, and the monument that commemorates and continues his lahors is Toynbee Hall, the history of which is well known.

## REPORT OF MR. AVES.

The congress was fortunate enough to secure a report from Mr. Ernest Aves, one of the leading spirits of Toynbee Hall, in which are combined to a considerable extent the operations of the two social science movements above described. It can not fail to interest all who desire the intellectual and social amelioration of the working classes. It will be seen that in this report Mr. Aves has not confined himself to the results attained through the instrumentality of Toynbee

Hall, but discusses what are called "university settlements" in general and cooperative educational movements elsewhere. He also deals with social science teaching in England, and the various agencies that are modifying elementary instruction in this direction. The following is his report in full from the original English draft, which was sent to Paris and translated there for the use of the congress. At my request Mr. Aves has recalled this paper and sent it to America for the purpose to which it is now consecrated, and I desire hereby to make grateful acknowledgment of his generosity.

> Present condition of popular social instruction in Great Britain, by Ernest Aves, Toymbee Hall.

INTRODUCTORY.
When first honored by the invitation to report to this congress, I was given to understand that I was to treat my subject, "Enseignement populaire social," with general reference to the nonstudent class; that is, to those whose first business it is, be it with hand or pen, to work for their own living. Thus, in a preliminary survey, it appeared that certain branches of the work carried on at evening continuation classes of the elementary schools, at courses of university extension lectures, at polytechnics, at university settlements, by educational committees of cooperative societies would, with much besides, have fallen appropriately within the allotted scope of my paper. The initial difficulty of the task seemed therefore to be found in its extent; in the variety of the sources from which information should be drawn; in the multifarious form in which the teaching was given; in the absence of any controlling authorityin other words, in the lack of system and coordination of effort. But a still more fundamental difficulty confronted me on the threshold. How was I to interpret and apply the word "social?" Needless to say, I do not propose to embark on the thorny though attractive road of definition. I would simply state that, while feeling the connotation of the word to be somewhat obscure when associated with the idea of scientific teaching, I entered upon my task with what appeared to me to be a sufficiently clear apprehension of its scope, but that from the outset I have been conscious of the haunting suspicion that I should often fail to draw a very close distinction between the social science and social practice. Even so, I have been often reminded of the celebrated chapter of a celebrated writer on snakes in Iceland. "There are none," he wrote; and so I, too, have been tempted to think at times that of l'enseignement populaire social in this country "there is none" would be a true statement. I recalled, however, the unconscious achievements of a well-known character in the drama of Molière, and was reminded how hasty such a conclusion might prove to be, for even as le bourgeois gentilhomme had talked prose without knowing it, so also it appeared that in a considerable number of directions public and private authorities, when intrusted with the administration of educational matters, were apt, perhaps also without knowing it, to be sanctioning and organizing some branch or branches of popular instruction that would appropriately come before the notice of this congress.

In nearly all efforts to provide popular instruction for those beyond school age, in spite of the differences of plan and of practice that they may present, certain common objects that they have in view may be detected, for almost all aim at preventing the sudden lapse into mental stagnation that is the too frequent sequel to the school period, or, if, as is too often the case, this has happened at its dispersal, almost all strive to prolong or to renew the period of student life, and to provide a completer intellectual equipment, be it for the "young person" or the adult. The presence of
such objects does not, hewever, differentiate the jopular instruction that is now given in most subjects, in science, in history, in modern languages, in technology, from that with which this congress is more immediately concerned. They are social in character, but they do not necessarily show any recognition of the importance of giving instruction in any branch of les sciences sociales. Many worthy citizens, for instance, might value highly the formation of classes in, let us say, building construction who might be not only indifferent to but actually opposed to teaching that would direct the mind of the students to the observation and analysis of the industrial structure of society; many, again, might favor the formation of classes in commercial correspondence in French or German who would look askance at courses of lectures on "The method of Le Play," or on "The working of the state pension scheme in Germany.'" L'enseignement populaire social seems to involve, however, not only a benevolent recognition of the general advantages of education, but the specinic recognition of the benefit that will tend to accrue from a more widely diffused and a more intelligent comprehension of a certain group of subjects-of economics; of economic history, both of one's own and of other countries; of the use of statistics; of the history of industrial legislation; of socialism in its various forms; of the tradeunion and cooperative movements; of the development of mumicipal life and the history of local government; of problems of poverty; of the principles of hygienic life; of the reaction upon social life of the appreciation of the beautiful in painting and in sculpture; of all social movements, both at home and abroad, and of the methods, historical or comparative, by which they can be most usefully studied. The list could easily be extended, but to describe the état actuel of the instruction given even in such a group as the foregoing in a modern and liberally governed community would be a somewhat overcomprehensive task, even if all the necessary material were at hand. Happily, however, the attempt became unnecessary. For the last few years I have had a close association with many of the steps that have been taken, not systematically, hardly consciously, perhaps-but, happily, many of the most useful things may be done without a clear perception of the relation in which they stand to wider principles-to apply some of the views that must, I think, have actuated the founders of Le College Libre des Sciences Sociales. It was a satisfaction, therefore, to be asked to treat my subject with more special reference to the east end of London, and to the work done at Toynbee Hall. This after-limitation of the scope of my paper had the further advantage that it still left me free to interpolate references to the larger movements and to the wider fields of operations which are illustrated at Toynbee Hall, and of which, indeed, it may be regarded as a convenient microcosm.

Toynbee Hall. -Toynbee Hall is the pioneer of the university and social settlements that are now found in sufficient numbers to explain, if not entirely to justify, the now common use of the expression "settlement movement." The story of the establishment of Toynbee Hall has been told on more than one occasion, and need not be repeated here. The building dates from 1884, and, coinciding as the inception of the settlement did with the sad death of Arnold Toynbee, his name was taken as one that fittingly expressed the hopes and aims of its promoters. It is situated in Whitechapel, in a spot that is well suited for the work, especially as being easily reached from all parts of the East and Northeast London, and from the City by those who work there in the daytime, and go east or north to their homes. Largely on account of its general accessibility, and partly because of the preponderatingly Jewish element of those living immediately around the settlement, those who have come to it have always been drawn from a large area. Thus, although the associations of the hall with its immediate neighbors, Jewish and non-Jewish alike, are numerousthrough the schools, through local administration, through one or two clubs, through the conferences and concerts to which those living round about come in largest numbers, through the audiences that are attracted by the music in the quadrangles on
summer evenings-the settlement has never professed to confine its operations to any well-defined area, and the Tower Hamlets rather than Whitechapel is its "parish."

By its constitution the settlement is a purely private undertaking, under the immediate control of a council elected by its subscribing members. It is dependent for its maintenance, as a "residential club," upon the payments for board and lodging made by those who live there-the residents-and as a center of educational and social activity upon the donations and subscriptions of friends and sympathizers. Canon Barnett has been the warden from the beginning, and the settlement owes much to the inspiration and guidance of his continuous care. The residents have averaged about sixteen in number, and there is accommodation, including visitors who come for a shorter time than those who are elected as residents, for about twenty men. Nearly all who stay in the house are graduates of either Oxford or Cambridge. The presence of the residents gives to the hall its characteristic feature of a "settlement," and much that is done necessarily emanates from them, aided by the much more numerous body of nonresident helpers. The annual expenditure on the various branches of the public work amounts to about $£ 2,500$. As the warden has himself written: "It is not easy briefly to answer the question 'What is Toynbee Hall?' It is not enough to say that it is the center of education, where every week some thousand students meet. Neither is it enough to say that it is a club of university men associated to promote the common good. It has rather become a name under which a society holds together, formed of members of all classes, creeds, and opinions, with the aim of trying to pass on to East London the best gifts of the age. Toynbee Hall has not been made, it has grown. Its classes, its lectures, its trade conferences, its excursions and entertainments, its pile of buildings-library block, exhibition buildings, Wadham and Balliol houses-have all grown out of the welcome extended by East Londoners to a few university men who came among them to share their knowledge and to do their duty as neighbors." With one or two features peculiar to themselves, settlements are some among the many illustrations that we see of the greater importance that is being attached to the development of the individual, no matter to what class he may belong. The intelligence and the morality of a community form its most precious possession, and the obligation to strengthen and deepen these is being more widely recognized. Some day perhaps it will be generally admitted that education should begin rather than end for the rank and file of the children of our country when the term of their school life at present closes.

Liviversity extension and unirersity settlements.-Some parts of the machinery by which the settlement carries on its educational work have been indicated by the above quotation from the warden, and most conspicuous are lectures, classes, and reading parties. In the organization of these Toynbee Hall has from the first been closely associated with the work of university extension, a development of university activity that started with quite distinct aims and with a different plan of operations some ten or twelve years before university settlements were thought of, but which is not infrequentiy confused with them.

University extension societies now exist in connection with Cambridge, the pioneer in this form of democratizing and expanding university influences, with Oxford, and with Victoria universities, and in London there is a separate society, unconnected with any single teaching body, although through its management closely allied to Oxford and Cambridge. All alike have education, and education given primarily through the medium of lectures, as their specific object, while, as we have seen, the characteristic feature of a university settlement is a place of residence in a working-class neighborhood, occupied by men (or women) of education and good will.

Although, therefore, there is no necessary connection between the tro movements, Toynbee Hall has from the first been the chief center in Eact London of the London Lniversity Extension Society, and the four or five university extension
courses have always been important items in the scheme of lectures arranged there year by year. The classes and reading parties have also been often subsidiary to these extension courses, having been sometimes started to carry on a small body of students eager for further guidance in the study of some subject to which they have been introduced, or, pari passu, with the main course; and, in addition to the "class" that every extension lecturer himself takes at which papers sent in by the students are discussed, questions are answered, and special points more fully, if more conversationally, discussed than is perhaps possible at the more formal lecture, an additional class has been formed to give still further help to a selected body of the students, whose aim may have been more serious or whose needs for assistance have been greater. In these and in other ways the university extension work has influenced the general educational work of the settlement. Special importance has always been attached to the maintenance of a close personal relationship between teacher and pupil, and, on this account, large numbers have always been deprecated, especially in the "reading party," in which, while extension audiences may have ranged from anything between fifty and two hundred, numbers have been generally limited to ten or twelve.

The subjects taught have been almost always non-utilitarian, in the sense that they have not been chosen as directly and commercially helpful in trade or profession. "Life, not livelihood," has been the watchword, and it has followed that to a great extent, by pioneer lectures, by short courses, and by other means, the demand for the teaching that is offered has had to be created. Fees have been low, but with the great mass of the people it is more difficult to make them expend a little mental effort, and a share of what may be a scanty leisure, than to induce them to pay even a nominal registration fee.

The character of the attendance has been instructive. Thus, with a competent teacher, a class room could always be filled for cheap instruction in shorthand or in commercial correspondence in a foreign language, because the direct utility of such classes appeals to a large number. But the educational value of such subjects is small; it is better that they should be taught on a purely commercial basis, and it is on these grounds that they and analogous subjects have been excluded from the Toynbee Hall curriculum.

To lectures on the principles of science, such as chemistry or electricity, even apart from their technical applications, it has been found comparatively easy to attract audiences that are largely working class; but when we come to such subjects as literature, or even history, the resources of working-class intellectual curiosity are apt to break down, and it is only the quite exceptional men who will be attracted.

It might appear that the practical bearings of the study of such branches of the social sciences as have been mentioned earlier in this paper would prove more attractive, but this has rarely been found to be the case. Perhaps, in many such subjects it is felt that the practical experience of daily life outweighs the value of teaching of the class room. In any case, the fact remains that few are drawn to the systematic study of social or economic questions, and that those who are, are often apt to be already interested in some practical question, measure, or propaganda, and thus to approach the subject rather in the spirit of the partisan than the student. It has thus been found that, while conferences on social, economic, or political subjects always interest and attract, courses of lectures or continuous class teaching on similar subjects have done so to a much more limited extent. The consequence has been that only a very small proportion of the lectures and classes arranged at Toynbee Hall have had any connection with the social sciences, however widely we may interpret their sphere. The settlement has an atmosphere that doubtlessly makes many "think on these things," but the students who are specially drawn to them remain, as is the case in the university extension movement generally, and even in the universities themselves, few in number.

The general question of university extension is being discussed at its special congress, but it will be appropriate to draw attention here to this apparent neglect on the part of large bodies of students up and down the country of a class of subjects in which they might have been expected to show an exceptional interest. In London and the suburbs a few courses are given under the auspices of the London society on some branch of economics, and an occasional one on the development of citizen life. But these form quite the exceptions, and the great majority of the courses, of which there were 166 in the year 1898-99, were on history, literature, or natural science. The report of the Cambridge syndicate for the same year tells by implication the same story, since " of the 119 courses 44 were on scientific subjects, 36 on historical subjects, 28 on literary subjects, and 11 on subjects in the departments of art, architecture, and music." "History" may, it is true, occasionally conceal a course that is primarily sociological in treatment, and is concerned rather with the development of some special form of social life than with that of a nation regarded as a political unit. So also in natural science such a course as one that was delivered on problems of life and health might be brought under the wide rgis of the social sciences. But such are still the exceptions, and the fact remains that practically all the teaching given was in domains that lie outside the purview of this congress. This is not so,because the subjects were not offered. The sufficient explanation is that the people did not ask for them. Similar gaps are noticeable in the report of the more recently formed society connected with Victoria University, but it is in the report of the Oxford Delegacy alone that the fact is specifically admitted and referred to. In its report for 1897-98, when two courses out of one hundred and forty-five were stated to have been on economic history and political science, the slight diminution in economic teaching shown by the results of the year is commented upon as follows: "When the university extension movement was inaugurated, it was confidently believed that on no subject would the artisans in the great centers of industry be more eager for instruction than in economics. Recent experience tends to belie these anticipations. But while the demand for such teaching has unquestionably diminished, the necessity for it is more pressing than ever." And again in the following year, when four courses out of a total of one hundred and fifty-five given were on economics and political science, the following comment appears in the report: "Political economy is still unaccountably neglected," but the hope is added that through the closer connection that is being established with the cooperative union "the demand for teaching in these subjects may be increased at no distant date."

Education and the cooperative movement.-With the cooperative movement that has just been mentioned, Toynbee Hall has from the first maintained close and friendly relations, mainly in recent years through periodical conferences on subjects of mutual interest, and through personal intercourse with several of the cooperative leaders.

Perhaps alone among the great working-class movements of this country, that of cooperation has corporately identified itself with a concern for education, and, although there has been much more discussion among those who are genuinely interested in its promotion than solid educational work among the rank and file, the old ideal of making the movement an educational force has never been forgotten. It is, indeed, a matter of congratulation that in connection with a movement in which the primary bond is necessarily found in the material advantages of association, its moral advantages and the intellectual advantages of education should have been held even as much in the forefront as they have been.

From the nature of the movement and from the ideal that it has accepted, it has followed that most of such educational work as has been attempted has been connected with the application and methods of cooperation itself, and with economic history, especially with the development of the principle of industrial association. For general educational purposes grants are made by an increasing number of cooperative societies, the aggregate amounting in 1898 to the considerable sum of $£ 53,000$. A some-
what small proportion of this total is, however, devoted to the expense of systematic teaching, and probably the greater part of the educational work so far attempted is in the shape of lectures (often illustrated by magic-lantern slides), conferences, etc., rather than in class work. It would appear, too, that the promotion of sociability, in, it is true, very simple and wholesome forms, rather than of knowledge, is allowed to absorb a portion of the above grant in the case of many societies. Meanwhile much is being done to urge the claims of education, especially by the educational committee of the united board. By this body an elaborate educational programme is issued annually, giving a long list of lecturers whose services can be obtained, drawing attention to educational facilities of various kinds that are available to cooperators, and printing short syllabuses with lists of suitable text-books for the study of the subjects in which classes may be formed under the auspices of the united board, and in which grants and certificates are awarded to successful candidates. In the recent lists of lectures special prominence has been given to the housing question, in its social, legal, and sanitary aspects. Figures are not available to show how much the occasional lecture list has been used, but there is evidence that it has been to a considerable extent. The figures for those who joined the classes arranged as above under the united board are given, and the numbers are hardly satisfactory. The total number of classes recognized in 1898 was only 52 among the whole of the 656 societies making educational grants, and the total number of students enrolled was 1,114. Even of these, 620 joined the purely utilitarian classes in bookkeeping, the remaining 494 being distributed as follows: 339 joined the classes formed for the study of cooperation, 101 those in industrial history, and 54 those in citizenship. In 1899 the return of those joining the classes in cooperation and in industrial history is still smaller.

In spite, however, of such small figures, in spite even of the prevailing intellectual aparhy that must be said to exist, and of the preponderating interest that cooperators naturally take in the success of their material undertakings, the enthusiasts within their ranks make themselves felt as a real force and prevent the movement from lapsing into intellectual stagnation, just as the sturdy common sense of all makes it forge ahead with remarkable steadiness on its industrial lines. The note of education is being constantly sounded, and the vigorous attempts that are made, not only to promote their own independent educational work, but to associate cooperators with the increasing volume of outside educational effort, especially perhaps with that emanating from the universities, are typical of the ideal that many among the cooperators have always striven to foster.

Social science teaching and elementary education.-But it must be remembered that nearly all divisions of the social sciences must be regarded as belonging to the higher branches of popular education. Few of the subjects would attract the young, and none could be taught to advantage unless the pupil had had the advantage of a fair general education. Of most the warning issued by the educational department with reference to its own scheme of instruction in the life and duties of the citizen would apply, that they "will be found difficult to teach except to those older scholars who are in the habit of reading and thinking intelligently about public affairs." The special importance is therefore seen in connection with our subject, not only that the primary schools should be efficient, but that steps should be taken by which their influence may be prolonged. Although still very imperfectly, this is being done with increasing completeness, and the night schools and mechanics' institutes of the past are giving way to centers more adequately equipped and more completely organized, though not always richer in the personal influences that are brought to bear upon them. The chief of these centers are the evening continuation classes of the elementary schools, the importance of which is greatly enhanced by the deplorably early age at which the limit of compulsory school attendance is reached. A slight
extension of this may be not unreaconably hoped for, but any proposal to extend the period of legal compulsion when the elementary school has once been left and the school age passed would probably be always doomed to failure, although much is to be said for a considerable age-extension of the period of compulsion, accompanied by a hali-time system of employment. As things are, however, the organization of the continuation classes throughout the country is attracting increasing attention, and the scale on which they are being started is steadily growing. The provision is, however, still lamentably inadequate, and the attendance, in view of the need if not of the demand, painfully small.

According to the education returns for England and Wales for 1898, there were, on August 31 of that year, about five and a half million children on the registers of the various day schools, and of these, while more than $1,200,000$ were under 6 years of age, only about 750,000 were over 12 . In the same year the number of scholars attending the evening continuation schools was 435,000 . About one-third of these, including those under the London school board, were attending classes for which no fee had to be paid, and the total numbers for the year show an increase of about 165,000 since 1895. Out of the total for $1898,47,110$ were over 21 years of age; 48,000 between 18 and 21; 220,000, or more than 50 per cent, between 14 and 18; and 119,000, or about 27 per cent, inder 14 . As considerably more than a half million children must cease day-school attendance each year, the number of those who at once cease attendance altogether must be very large, in spite of a certain amount of miscellaneous educational provision that is made and not included in the above returns.
The great bulk of the instruction given in the evening continuation schools has no immediate concern for this congress, but it will be instructive to give the following summary statement from the official return: "The elementary subjects-reading, witing, and arithmetic-are more taught than any other subject. In 1898, 127,518 scholars received instruction in arithmetic, 81,556 in writing and composition, 58,271 in reading and writing combined, and 42,345 in reading and recitation." This shows how many of the scholars still come to night schools in order to rub up or improve their knowledge in the elementary subjects. Of the other subjects for which grants are paid in these schools, needlework is much the most popular. Last year 59,159 girls and women received instruction in this subject. Next came gergraphy, which was taken up by 47,532 scholars. Next, shorthand, which was studied by 47,302 scholars. Next, vocal music, which was taken up by 37,036 . Bookkeeping, mensuration, and domestic economy follow in the order named. This indicates the practical turn that is being given to the studies of the evening schools. History, commercial arithmetic, "the science of common things," ambulance work, commercial geography, French, algebra, "the life and duties of the citizen," chemistry, English, human physiology, elementary physiography, hygiene, magnetism and electricity, elementary physics, and agriculture come next in popularity and in the order given. A comparatively snall number of scholars took up Euclid, horticulture, Welsh, mechanics, commercial history, light and heat, botany, German, Latin, or navigation. Of these miscellaneous subjects that of "the life and duties of the citizen" will appeal especially to this congress, and the inclusion of a detailed scheme for guidance to teachers by Mr. Acland a few years ago, in the code of regulations for evening continuation schools, marked a new departure on the part of the education department. ${ }^{1}$ In this subject 7,187 pupils were receiving instruction in 1898.

[^54]Discellaneous agencies as aids to caucation. -The figures given above, showing the low age at which public education stops for the great mass of children and the large proportion that at once drops out of all educational influences, show the importance of all agencies that endeavor to counteract the forces making for ignorance and stagnation.

In this connection, in addition to those who give their time to administrative work through the medium of publicly elected school boards, and to those connected with the great denominational agencies, such as the National Society (of the Church of England), the British and Foreign School Society, the Wesleyan committee of education, and the Catholic school committee, there are many other voluntary agencies, and among these the Union of Lancashire and Cheshire Institutes and the Yorkshire Union may be specially mentioned. The former of these was started about sixty years ago, and its general objects are stated in the rules as being "to promote primary, secondary, and technical education among the members of the institutes in union, and to secure the efficiency of such institutes." Examinations are arranged, certificates, special prizes, and exhibitions are offered; help is given in the arrangement of series of public lectures; and the general advantages, advisory and consultative, of associations are secured. The main function of the union may be said to be to advise, to strengthen, and, above all, to stimulate. Some 410 institutes of various kinds, with a total membership of 151,000 , are affliated, and a comparison of the list of these with the rule stating the constitution of the union is a sufficient illustration of the
(day and evening continuation schools, provision of schools and attendance at school, school-attendance officers, free librarics, picture galleries and muscums, technical education); the destitute poor ; roads, streets, buildings, and land -; police and justice.
B. Central government:
(1) The Crown and the two Houses of Parliament -; working of the Parliamentary system -
(2) The judicial system -
(3) Executive government -. , the work and the powers of the executive government
(. Duties of citizens in relation to local and central govermment:
(1) Right and duty of roting
(2) Rates and taxes $\qquad$ -.
(3) Pubiic hcalth
$\qquad$ - duty of scholars -; influence of school on character as well ag on intelligence; waste of force and money through leaving school too early; teclinical education, its value for the worker; higher education and the universities; school and college only the beginning of the citizen's education.
(5) Provision for the poor
(6) Need of order and respect for law $\qquad$
(7) Public spirit and public opinion

> 2. THE EMPIRE
$\qquad$
3. INDUSTRIAL AND SOCIAI LIFE AND DUTIES -

The great industries of the country, their growth and development. Changes caused by the use of machinery.
Association of workers:
(1) Trade unions, their history and work; labor disputes and strikes; arbitration and conciliation.
(2) Workingmen's cooperative societies, their work in disiribution and production.
(3) Friendly societies; training in habits of industry; thrift and self-help.

Value of the work of voluntary associations in the education of the adult citizen.
The State and labor: Factory acts; mine acts; women's and children's labor; dangerons employments; health and safety of the worker.
Information as to condition of workers: Labor department of the board of trade.
The Government and municipalities as employers of labor, dock-yards, arsenals, and public works.
The services rendered by retail shopkeepers, merchants, manufacturers, and other persons engaged in distribution and production. The importance to the nation of effective, honest, and intelligent management of all forms of business and industry.
The disastrous results from mismanagement or fraud,
The duty of the community to sympathize with every reasonable effort of the workers to improve their condition and develop their intelligence. That which injures their efficiency or lessens their hopefulness leads to natural loss and to the maintenance or increase of poverty and ignorance. A healthy and skillful body of workers, upright in character and self-reliant, is a source of strength to the country.
Faithful discharge of homelier duties of life is the best preparation for their discharge in city and nation. Cuvic duty begins in the life of the family; expands with occupation in tiade, business, and profession.
In carning their livelihood men and women also serve their fellow-citizens and their country. Membership of self-governing societies is among the best means of civic education.
As intelligence, honor, and virtue are essential to the welfare of the family, so is patriotism necessary to national and social life. We have to recognize that our public responsibilitics are duties as much as personal and family obligations. We have no right to expect just legislation or impartial administration unless we perform with intelligence those public duties which devolve upon ali. If we suffer injustice in connection with public affairs, we have little right to complain unless we have done our duty.
change, already alluded to, that has come over the form which popular instruction is now taking. According to the rule, "the Union shall consist of mechanics' institutions, workingmen's institutes, mutual improvement societies, educational institutes, iyceums, athenaeums, useful-knowledge societies, technical schools, literary institutes, evening-continuation schools, young men's Christian associations, and other societies in Lancashire, Cheshire, and North Derbyshire, and also such classes under the auspices of a county council or county borough council within such area as may be agreed upon, etc." The rule in its present form was adopted in 1894, and while largely modernized the older enumeration of appropriate constituent bodies has evidently been retained. At the present time all excepting 15 or 20 of the 410 institutes in union might be comprised under technical and evening-continuation schools, and a very large proportion are connected with some public administrative body, either school board or county council.

In 1898, out of a total of 34,264 papers sent in to the examiners on various subjects only 158 were from candidates in history, 132 in The Life and Duties of the Citizen, and 13 in political economy.

The Yorkshire Union, of which it may be noticed the official name is the Yorkshire Union of Mechanics' Institutes, but which adopts the more comprehensive and more modern description in its report of the Yorkshire Union of Technical and Educational Institutions and Yorkshire Village Library, is a slightly older association than those of Lancashire and Cheshire. It has much the same ends in view, but, while its scope and methods are largely similar, a somewhat wider educational outlook is perhaps indicated by the simple statement in its rule that "the union is established for the advancement of literature, science, and the fine arts." More appears to be done to foster the older form of institute, but one feature of the Yorkshire Union, illustrated (but on a much smaller scale) in the union of the neighboring counties, is especially distinctive-the Yorkshire Village Library.

Most English towns now possess some kind of public library, and the difficulty of obtaining access to books is often no longer a crying evil there. But in the villages the provision of books is still much more meager, and the arrangement is admirable by which for a nominal subscription the affiliated institutions of the Yorkshire Union can obtain their boxes of fifty volumes each three months. This plan is especially useful to the small village institute and reading room, and it is stated that sets of books from the Union Library of something over 40,000 volumes are now circulating in about 200 villages. The particular educational value of these silent teachers can not be indicated, but in these villages and throughout the country the educational value of books, even when unaccompanied by the systematic guidance of a teacher or lecturer or some other friendly adviser, is perhaps exercising as great a quickening of intelligence as the organized educational work with regard to which it is possible to obtain more exact information.

Toznbee Hall cooperative travel.-Reverting now to Toynbee Hall, the various educational societies that have grouped themselves round the settlement may be mentioned, since they are in many respects distinctive features of its life. These organizations, including within their number two small economic clubs, have largely sprang from the impulse of the students themselves who have been drawn together by the attraction of a common interest. They are democratic and seli-gorerning in their constitution and management, and several of them are chiefly differentiated from the smaller classes by this fact. Their chief business generally consists of their periodical meetings, but some, especially the antiquarian and the natural-history societies, arrange a considerable programme of visits, generally to places in or near London that offer especial attractions to their members. In the case of the lastmentioned society, however, summer excursions have been taken to more distant places, it having applied the principle of cooperative educational travel, inaugurated about fourteen years ago by the Toynbee Travellers' Club.

The inception of this club, now well known-for it has had many imitators and has led by example to the formation of several extensive organizations in this countrymay be traced to the desire on the part of a few students of the life and writings of Mazzini to visit some of the places in Italy chiefly associated with his name. But the attractiveness of this proposal and the advantages in economy that could be secured by the inclusion of a larger body rapidly added to the number of those who wished to go, and in the event the ten special students of Mazzini had grown into the party of about eighty, of both sexes, who in the spring of 1887 made the first organized Italian expedition from Toynbee Hall.
On its return the club was formally constituted, and it has ever since been an important educational and social influence at the settlement. All excursions that the club arranges are preceded by lectures on the places to be visited and a bioliography is carefully prepared for the guidance of the reading of the members. Most of the expeditions have been to Italy; others have been to Switzerland, to France, to the Netherlands, and to Germany; while two, the club getting bolder with the success of its journeyings, have been to Spain and to Greece.
In 1892-93 the following expeditions were made:


Note.-The cost given includes all necessary expenditures, except the midday meal.
As illustrating the ulterior educational objects that the club always endeavors to keep in view, it may be mentioned that the second expedition above was planned with "the special aim of studying objects connected with the Revolution of 1789." While in Paris the party was greatly indebted to the skilled guidance of M. Émile Corra, and in the same way while in Rome the party that went there is reported to have been greatly indebted to many friends, both Italian and English. In general preparation for the expeditions of the year fourteen meeings were held at Toynbee Hall, when papers were read, among others by the Bishop of London (Dr. Creighton) and Mr. Frederic Harrison. Two special lectures were also given by Dr. Rawson Gardiner, "in anticipation of the projected visit to Rome," on the place of that city in the history of the world.
In 1892 the occupations of 153 of the members of the club were classified as follows:

| , | Women. | Men. | Total. |
| :---: | :---: | :---: | :---: |
| Civil service: |  |  |  |
| Post-office |  | 10 | 10 |
| Other departments |  | 8 | 8 |
| Clerks and salesmen. | 3 | 14 | 17 |
| Domestic: |  |  |  |
| Married | 13 |  | 13 |
| Unmarried | 5 |  | 5 |
| Miscellaneous: Architects (2), basket maker, bookbinders (2), brush |  |  |  |
| maker, builder, chemist's assistant, hospital nurse, school-board kindergarten instructor, journalists (2), lectirers (2), librarian, printers (2), |  |  |  |
| reporter, sculptor, secretary, shopkeepers (4), solicitors (2), solicitors' clerks (2), watchmaker, wood carver. | 7 | 23 | 30 |
| Teachers: |  |  |  |
| London school board. | 45 | 16 | 61 |
| Other. | 9 |  | 9 |
| Total | 82 | 71 | 153 |

In 1899 there were 234 members in the club.
Residences.-Men and women have always been placed upon an equal footing in the enjoyment of the rarious educational facilities that the settlement is able to offer, and while the burden of organization has always been mainly borne by men it has been found that the influence and help rendered by those of the opposite sex has in many directions proved invaluable. In one special way, however, it has been found possible to provide for men only in the two "students" residences" now flourishing by the side of the settlement. These have now some fifty occupants. Each man has a separate room, with the use of a common dining and reading room, while the proximity of Toynbee Hall insures him many advantages, both social and educational, and the use of a good library. From 7s. to 8s. per week is paid for rent and attendance, and the internal economies of the house are managed by the students themseives. The houses are self-supporting, and the aim has been to provide residences to which men earning their own living could come, even though their incomes did not exceed $£ 75$ per annum. The qualification for residence, in addition to satisfactory references, is the willingness to study on one or another of the lines generally laid down by the governing body. The general supervision of the students rests with a censor of studies, who is appointed by the Toynbee Hall council.
These students' hostels, introducing something of collegiate life into the midst of a poor district in East London and planted at the side of a university settlement, have made some dream of their expansion into something of the nature of a democratic university. Such a development is, however, improbable, partly owing to the situation that has been chosen, and because the actual claims of the district around them are apt to make too strong a demand upon the thought and active sympathies of the men who may come to live in it. But the establishment of these residences, hardly less than that of the settlement to which they owe their origin, is of considerable interest, both on social and educational grounds.

Ruskin Hcll.-During the past two years, by, as it were, a converse application of the settlement principle, another kind of students' residence, Ruskin Hall at Oxford, has been started on more classic ground, and with aims that bring it more directly within the notice of this congress. The hall is described as a "college for workingmen;" there is accommodation for twenty-five students, and it is full, no vacancy, it is stated, having occurred without leading to many applications. The cost of residence, including board, lodging, and tuition, is £31 a year, or 12/6 a week.

In addition to the hall at Oxford (which can only be used by men who are able to leave their work and devote themselves for a time to their education), its objects are carried out in three other ways: (1) By the Ruskin Hall Correspondence School, in which some 1,500 students have been enrolled, and which is intended "to enable any student to study subjects of social and political interest under the direction of the staif of tutors at Oxford;" (2) by a system of lectures delivered in different parts of the country; and, lastly, by establishing other residential halls, where students who can not leave their work can live. Such halls have been already started at Manchester, Birmingham, and Birkenhead, and others are in contemplation.

The special educational object both of Ruskin Hall and of all the affliated branches of its work is the provision for men who are working or who intend to work at their respective trades, of instruction in the broad outlines of the national history, and especially of the history of its political and social institutions. Thus industrial history and the history of the various working-class movements, such as trade unionism and cooperation, will be among the subjects to which prominence will be given. Great enthusiasm and ardor have characterized the inception of this Ruskin Hall movement, and already close relations have been established with many workingclass organizations-with the cooperative movement, with the trades councils, and with the trade umions. The intimate association that the hail has established with the last of these is perhaps the most distinctive feature of the morement, and in it,
according to a recent statement, lies its chief interest and hope. "Five or six of the official leaders of the trade unions are members of the council, and it is intended that the property of the college shall be held in trust by the labor organizations." In their close connection with and in the welcome that they have extended to Ruskin Hall the trade unions have made a happy departure from the indifference that, so far as they are corporately concerned, they have generally shown in the past to the claims of education.

Inrestigation and research.-On the general question of investigation and research I have little to say with regard to its bearing on popular education. For the most part they must be the work of individuals, although in any investigation of contemporary phenomena many can often help in the collection and preparation, or, still more probably, in the giving of information. Thus, the interest of many individuals may be directed to a new field of thought; they may be led to look at old and familiar facts from a new point of view, and may discover in them a new significance. Among the subjects, for instance, in which a certain amount of investigatory work bas been carried on from Toynbee Hall have been the following: The relation of voluntary to official sources of relief to the poor; the provision of meals for school children; the employment of school children; "shelters" and common lodging houses; the working of the Salvation Army social scheme; alien immigration, and the Jews in East London; household working-class expenditure; the building and furniture trades in London; the problem of the unemployed; and local house rents and overcrowding. In the study of such questions much of the general interest referred to above has doubtlessly been aroused, but the starting of a new curiosity is something distinct from education; it may lead to it, but can not be identified with it. For a full and practical description of the methods of social and economic investigation and research I shall probably be safe in referring my readers to the paper contributed to this congress by Professor Hewins, the director of the London School of Economies. ${ }^{1}$

Other centers.-Other forms of educational work that are being carried on in East London might have been appropriately alluded to, such as the industrial exhibitions at the People's Palace, stimulating to a higher degree of technical achievement and to a more intelligent interest in the development of industries; to the excellent music provided at the same place, at Oxford House, the university setilement in Bethnal Green, and, on a smaller scale, at Toynbee Hall itself; or to the schools of haidicraft, aiming alike at a restoration of the sense of the dignity of manual labor and at a greater beauty in the things produced. In other parts of London, also, other centers of "l'enseignement populaire" exist, such as the pioneer Working Men's College, Morley College, and other settlements, such as Mansfield House, in Canning Town, the Bermondsey settlement, the Passmore Edwards settlement, and the women's settlement in Southwark, to which reference might well have been made. But the exigencies of space, and not indifference to the value of their work, make curtailment necessary. The important group of London institutions known as the polytechnies is, I understand, being dealt with by Mr. Sidney Webb.

Art as a social influence.-To one other subject, however, suggested by the annual art exhibitions in Whitechapel and by the immediate prospect of the opening of a permanent gallery and museum in the same district, I would allude, namely, to the social and educational influence of art, referring in this connection especially to what is being done in Manchester through the Manchester Art Museum.

Probably no place is more alive to the great popular educational value of painting and other forms of pictorial art, especially, perhaps, to those who live in large centers of population-and to the need of systematic exposition, if this value is to be secured-than this great manufacturing city, a city that is also distinguished by the admirable organization of its various grades of evening continuation schools.

The work of the Manchester Art Museum was begun in 1877, and is now described

[^55]as having created "the largest and most carefully planned system which has yet been tried in a large town for giving the mass of the people knowledge and admiration of the beauty of nature and of the most beautiful and interesting forms of human work." "The museum contains the following, amongst other collections: Collections of pictures, with descriptive text, illustrating important epochs in the development of the art of painting from the time of the cave dwellers to our own days; of pictures illustrating the history of architecture and of sculpture; collections to explain and show the development of the chief reproducing processes, such as wood engraving, line engraving, etching, lithography (these collections include clearly printed descriptions of each process, and sets of tools, etc., used in it); pictures of wild and garden flowers, trees, butterflies, birds and other animals; pictures of beautiful scenery near Manchester, and of fine scenery elsewhere; pictures to give knowledge of the most striking part of the earth's surface-volcanoes, deserts, rocky and sandy coasts, etc.; pictures of historical scenes and noble deeds; portraits of historical personages and of local worthies; pictures for children, such as well-illustrated tales; casts of sculpture, textile fabrics, metal work, pottery, glass, etc., including many simple objects intended to guide work people in the choice of things used in their own homes." In addition there are about 250 collections of educational pictures, twelve in each, which are lent without charge to the elementary schools in Manchester.
"The whole scheme of our Manchester Art Museum," writes Mr. T. C. Horsfall, its honorable treasurer, "is based on our belief that l'action sociale de l'art may be very strong and very beneficial, and all the work done in and in connection with the museum-all the talks about pictures given to children in school hours and to grown-up visitors-are efforts to use art educationally." Thissystematic educational use of an art museum will be perhaps repugnant to the æesthetic sense of the hypercritical, and the prominence given to the ethical and even the didactic sides will seem to many to be inconsistent with the fullest appreciation of beauty. But for the purposes in view there is little doubt but that the Manchester method, this new "Manchester school," is on the right lines. Its ultimate practical object may be indicated by the following extract from the museum report for 1898-99: "As the inhabitants of our towns elect the town councils which govern them, the evil conditions now existing in the towns can not be altered unless the majority of the inhabitants desire that they shall be altered; and desire for the alteration of the conditions can be created in the majority of the inhabitants only by knowledge that existing conditions are bad; they must know that better conditions are possible, and know why the better conditions are to be desired. An alteration in the state of our towns great enough to make physical, mental, and moral health possible for the majority of their inhabitants can therefore only be the result of a process of education and training which makes known to them the fact that there is such a thing as full, healthy life, and gives them the strong desire to live it. * * * To this end," according to the museum handbook, "the collection has been chosen and arranged ${ }^{1}$ for the purpose of making it as easy as possible for persons quite ignorant of art to acquire the knowledge and the habits needed to feel the best infuences of works of art"-"knowledge,"
${ }^{1}$ Thus printed descriptive and explanatory labels are much used. In addition to labels describing individual pictures, others describing certain classes of pictures have been prepared. Thus the following is used for landscapes: "Everyone should learn to enjoy the beauty of beautiful scenery. The enjoyment of it is one of the greatest and most wholesome pleasures we can have. It gives us countless pleasant feelings and thoughts to keep our hearts and minds in healthy activity; it helps us to gain wholesome pleasure from books, many of the best of which describe scenery, from pictures which represent it, and from many other things made by men, such as beautiful printed stuffs, wall papers, wood carving, and metal work, which contain representations of beautiful things found in the country; and it gives great help to those who wish to become good designers. Everyone in Manchester who will take a little trouble can learn to love beautiful scenery, as on all sides of the town are beautiful places within a few miles. If most of the people in Manchester loved beautiful scenery,
to quote again from the report, "of the beauty of nature, and knowledge of the beautiful works of man, and of human lives."

Conclusion.-In the preceding paper I have endeavored, as requested, to indicate some of the representative phases of the educational work of a university settlement in the east end of London, and to describe some of the other more important ways in which attempts are being made to help the nonstudent class to have something of the student's mind, by which the social and industrial organism of which they form a part may be better understood, and the continuity of its life more fully realized. Knowledge helps to give a truer social perspective, and a truer perspective helps to the realization alike of duties and of powers. These between them have carried us far afield, and the variety of the subjects to which reference has been made will not, I trust, leave me open to the charge of having included the irrelevant. I am tempted to hope that this will not be so, because of the admittedly comprehensive character of the appropriate subject-matter of this congress, and by the scope of the subjects included in the curriculum of Le Collège Libre des Sciences Sociales itself, under the distinguished auspices of which we have been convened.

REPORT OF MR. WEBB.
The practical and enlightened socialism of England which conld produce a Toynbee Hall has also invaded the local politics of that country and placed upon the London county council Mr. Sidney Webb, whose numerous writings are familiar to all serious readers. It was known to the organizers of this congress that Mr. Webb had interested himself deeply in the recent movement in London which resulted in the London School of Economics and Political Science, recognized by the commissioners under the University of London act (1898) as a school of the university in the faculty of economics and political seience (including commerce and industry), and he was asked to prepare a report for the congress on commercial education, which he consented to do.

Owing to Mr. Webb's inability to attend the congress, this valuable report did not receive the attention which it deserved, but it was printed and distributed with the rest. With the approval of Mr. Webb and through the courtesy of the secretary of the congress, M. Hauser, I have obtained the original English draft, which is as follows:

The development of commercial education in London, with its effect upon the provision of instruction in economics and political science, by Sidney Webb, LL. B., member of the London courty council.

Though England has contributed in no small degree to economics and political science, there was until a few years ago very little organized teaching in the subject. Twenty years ago, a century after the publication of Adam Smith's Wealth of

[^56]Nations, there was practically no instruction in economics or political science in primary or secondary schools. At all the universities put together there were only about a dozen professors lecturing on the subject, and few of these devoted their whole time to it. With the exception of the Royal Statistical Society, in one part of the field, there was in all England not one scientific society or one scientific periodical dealing with economic and political science. During the last few years a great change has taken place. The elements of economic and political science are now occasionally taught in primary schools and often in secondary schools. The number of university professors in the subject has considerably inereased. New societies and new journals testify to the great increase in the number of persons interested in the subject.

This change may be attributed to two main causes: First, the growing conriction that the social and political difficulties of the age are largely the result of economic causes, to be coped with by economic solutions; and secondly, the tardy discovery that economics and political science form the basis of all the higher types of commercial education. The recent great development in economic teaching in England has, in fact, been brought about mainly by the increased desire for a better system of commercial education. It is with this aspect of the change that I propose to deal in the present paper.

A few years ago it was common to cay that there was no commercial education in England. Even as lately as 1893, when Professor James reported to the American Bankers' Association upon the provision made for commercial education in the various countries of Europe, he was able practically to omit all reference to the United Kingdom, on the ground that nothing of the kind existed there. ${ }^{1}$ This statement is, as we shall see, no longer completely true, even if it ever was. But every foreign observer continues to be puzzled by the contrast between the boundless and erer-increasing business transactions of the British Empire, and the lack of provision for the technical training of those who are charged with them.

The main canse of this deficiency is, undoubtedly, the ingrained belief of the English business man that there is not, and nerer can be, any "commercial education" comparable with that which a man "picks up" in the actual business of daily life. Until quite lately the most intelligent merchant never dreamt of seeking for his son any special "commercial education." He either sent him to Oxford, where he usually studied the ancient classics, or else the father allowed his son to enter his office at 16 , learing school prematurely for this purpose.

Since the conference, convened by the London Chamber of Commerce in 1887, the subject has been persistently pushed by that body, which deserves credit for its early and unwearied efforts. Other chambers of commerce have since taken the matter up and have set on foot promising investigations. ${ }^{2}$ But, until quite lately, all the attempts failed to create an organized system of commercial education in the United Kingdom, or, as it must be added, to accomplish anything to speak of in the way of converting the ordinary business man to a belief in the subject.

This long-continued failure, not yet wholly overcome, I attribute largely to the absence of any clear conception or what is required.

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## What is now being supplied in England is-

I. More commercial instruction, not better commercial education.
"The Englishman enjoys the best commercial education in the world," I heard one eminent German remark. "What he needs is more instruction in commercial subjects." The distinction is fundamental, and the failure to understand it accounts for much of the apathy or hostility of business men to commercial education. Those who push schemes of what they call commercial education do not deny that far and away the best training for a business man is to be gained in business itself. They make no proposal to supersede the merchant's office by the school, or to substitute any academic pupilage for the apprenticeship of the city. Apprenticeship schools have found no favor in England, either in commerce or in the manual crafts. The English view is that technical classes are no substitute for the workshop, but only its complement. In the same way, schemes of commercial education are not intended to train the business man, but only to teach him things that he does not as a rule pick up in the city. He may do without this knowledge. He may hire some onie else to supply it. But, speaking generally, he can not get it from any other source than a definitely organized institution.
II. Commercial education must be divided into three distinct grades.

There is, first, the instruction of the youth before he enters business life. There is, second, the provision of opportunities for evening instruction for the young clork. And third, lut perhaps most important of all, there is what may be called higher commercial education, required by every officer of the commercial army, if not also by every ambitious member of the rank and file.
III. We are obtaining more variety in our secondary schools, including some which prepare boys deliberately for business careers.

In spite of all the improvement in English middle-class schools, since Matthew Arnold bewailed their inefficiency, most of them still seem to me to suffer from not being quite sure what they are aiming at. I do not pretend to know what school curriculum will fit boys most successfully to be clerks or merchants, civil engineers or bankers, actuaries or chemists. Such a curriculum would perhaps bave no very obvious connection with their future work. But I can not believe that the best curriculum in each of these separate cases is identical with the best curriculum for all the rest, and for a university career. The idea that a "good general education" of a literary or classical type is an adequate, if not indeed the best, preparation for every kind of career, sounds like a survival from the middle ages.

This has during the last few years become increasingly recognized in England. It is now held that there should, at any rate, be a clear distinction between an cilucational course which ends at 15 or 16 , and one which is intended to be continued up to 22 or 23. Yet so strong in England is the tradition that education is one and indivisible, that the vast majority of "middle schools" continue to go the same way as the "high schools," habitually working up to the same system of examinations, and pursue accordingly much the same curriculum with merely minor variations as to the relative time allowed to the several subjects. This muddling up together of "gymnasium" and "realschule," of "lycée" and "école commerciale" can not but be detrimental to both varieties. There must be room for some schools, which need not be called commercial schools or bear any other badge of supposed inferiority, but which should reject all connection with the classical or mathematical sides of the university, which should decline to follow its traditional curriculum, and which should arrange a course of studies deliberately based on the needs of boys who will become clerks in commercial offices at 15 or $16 .{ }^{1}$

1 It is the crudest of misconceptions to suppose that such a curriculum would be made up of shorthand and bookkeeping, or the playing at commercial transactions, once tried (and, I believe, abandoned) in some German commercial institutions. The inimitable stock exchange school, described in R. L. Stevenson's Wreckers, is scarcely a wilder parody.

This, I know, will be misunderstood, as involving a too early "specialization," the loss of culture, and so forth. What I am advocating involves no "narrowing" of the curriculum. It implies, on the contrary, the inclusion of much more culture, the taking of a wider view of existence, a great deal more of "seeing life truly and seeing life whole," than the average secondary schoolmaster, experienced only in one narrow line, is as yet either capable or conscious of. One of the greatest difficulties in the way is, indeed, the lack of adequately trained teachers. But it does mean the abandonment of scholastic prejudice and tradition in favor of a purposeful adaptation of means to ends. It means putting a great deal of deliberate contrivance into the business of making the most of three or four years of a boy's life.

I do not pretend to suggest what form this contrivance will take in each casehow to produce the greatest possible efficiency without impairing the whole man. We are, in England, quietly learning much from the experience of other countries. The London county council has sent six selected teachers to work in German and French commercial schools, with a view to copying their best features in English schools. We have particularly admired the "écoles supérieures de commerce" of the principal French towns, and especially their deliberate choice of subjects with a single eye to turning out the best, and therefore the most highly cultivated, business man--the complete absence of Latin and Greek, but, on the other hand, the very high development to which other teaching is carried. ${ }^{1}$

An experiment on these lines is now being tried in London. The London county council has arranged to have carried on, at University College, Gower street, a good secondary school, giving an education deliberately and exclusively directed to turning out the best possible (and therefore, let me repeat, the most highly cultivated) commercial clerk or business man. In this school we are to some extent following the model of that estabished as long ago as 1863 by the Paris Chamber of Commerce itself. ${ }^{2}$
IV. The special commercial instruction of the young clerk is part of the work of evening educational insticutes. What is most needed here is the employer's cooperation and encouragement.

London is preeminently the city of clerks, containing not only a far greater number than any other center, but also probably a greater proportion to the total population than elsewhere. For their evening instruction in economics and commercial geography, French, German, Italian, Spanish, Portuguese, as well as in arithmetic, bookkeeping, typewriting, and shorthand, there is now fairly good provision made at more than a score of public institutions in different parts of the metronolis, which number in these subjects alone probably 20,000 separate students. ${ }^{3}$

But 20,000 students represent only a small proportion of the young men and women in London between 15 and 25 , and $I$ fear we must conclude that the majority do not trouble about anything but cricket or bicycling after their office day. This is where the German clerk gets ahead of us. "I would much prefer English clerks," said the head of one of the very largest firms in the city, "but I find my office full of Germans. The English clerk takes no intellectual interest in his work, and seems to give his mind to sport."

If employers made a point of letting it be known they liked their clerks to attend

[^58]evening classes, and considered the fact in their promotions, the 20,000 students might soon be multiplied fourfold.
V. In the teaching of modern languages in particular, England is behind both Germany and France in method and variety.

All competent witnesses seem to agree that English teachers of foreign tongues, whether in day schools or evening classes, have much to learn from Germany in pedagogic method. All testimony points to London being far behind both Berlin and Paris in the number of languages actually taught. England does more trade with the East than any other country, but the young city clerk or commercial traveler who sought to learn modern Greek, Arabic, Turkish, Persian, Malay, Armenian, Chinese, Japanese, Annamite, Hindustani, or Tamil, to say nothing of Russian, Dutch, and Norwegian, would find considerable difficulty in getting instruction at low fees and convenient hours. There is a School of Oriental Languages, promoted by the Imperial Institute in conjunction with University and King's Colleges, which has hitherto failed to secure more than an infinitesimal number of students, and these few are, I am informed, almost entirely noncommercial. ${ }^{1}$ But with the establishment of a new university in London this year, this branch of commercial education has received a new impetus.
VI. Our most striking deficiency has hitherto been in higher commercial education, the provision of higher instruction in commercial subjects for the business man.

We have until lately had nothing in England to correspond with the École Supérieure de Commerce of Paris, for pupils between 16 and 20. We have equally had nothing corresponding with the École des Hautes Études Commerciales, which is intended to give pupils between 19 and 22 , who have already completed their secondary education, two years special training in the subjects needed by the banker and merchant.

Similarly there has been until lately, in all England, nothing corresponding to the École Libre des Sciences Politiques at Paris, but this reproach has now been removed.
VII. The London School of Economics and Political Science is a high school of commerce.
London has now got the begimning of a high school of commerce in an institution started quietly in 1895 and already affording an experience of great interest. The London School of Economics and Political Science was founded by a little committee, who believed it possible to create a demand among men engaged in the practical business of life for instruction in the concrete applications of economics to the affairs of commerce, finance, and public administration. The London Chamber of Commerce had already tried the experiment of inviting Dr. Cumningham to give a course oil lectures on commercial history, which had been well attended by attentive andiences of young business men. That experiment was followed up, systematically extended to other subjects, and made part of an organized course of education, under the directorship of Prof. W. A.S. Hewins, M. A. Through the intermediation of the London county council the new school was placed in communication with the London Chamber of Commerce, which readily lent its premises for some of the work and in every way promoted the idea.

The school is now completing its fifth session, during which it has had over 400 separate students, men and women, from 17 years of age upward, drawn mainly from two classes. The greater number belong to the class of clerks, managers, and young business men engaged in banking, commerce, insurance, railway administration, or the government service (national or municipal). The minority belong to the student class, including between sixty and seventy postgraduates, specializing on economics and political science and representing, besides the British seats of learning, universities from Moscow to Chicago, and from Budapest to Tokyo. Among the busi-

[^59]ness students, with whom I am more closely concerned here, are a few principals, bankers and merchants, actuaries and insurance brokers, railway managers, and heads of important public departments, but the majority are naturally young men in subordinate positions, for whose convenience the bulk of the work is done between 6 and $9 \mathrm{p} . \mathrm{m}$. One or two business houses have paid the very low fees for their own clerks, and this course has been adopted by two railway companies-the Great Western and Great Eastern-whose example will probably be followed by others.
The curriculum of the school includes commercial history and geography, the principles and practice of banking, currency, and the foreign exchanges; commercial law, the economic and industrial history of the principal countries, the history and incidence of taxation, including customs tariffs; the principles and practice of railway administration at home and abroad, the history and present position of factory legislation and trade unionism, the methods and interpretation of statistics, with special reference to commercial, financial, railway, and administrative statistical returns, together with systematic courses in economics. There are also departments for political science (including the study of foreign constitutions and municipal government) and paleography for historical students. ${ }^{1}$

In connection with the school there has been established a unique specialist library, the British Library of Political Science.

IIII. The influence of commercial education on the teaching of economics and political science is to render it concrete and specialized.

It is easy to see that this union of the idea of commercial education with that of economics and political science is destined to produce certain changes in the manner in which these subjects are studied and taught. For some years past there has been a strong reaction in England against the abstract and hypothetically deductive method of economics, employed by Ricardo, Mill, and Cairnes, as by the leading economists of France. In this reaction preference was at first shown-by such authors as Ashley, Cunningham, and Hewins-for the historical method followed by Roscher, Schmoller, and so many of the German economists. But with this historical method there is now coming to be associated that of the inductive investigation of the concrete facts of social organization. Professor Marshall happily combines all three methods. The work of Charles Booth, David Schloss, Llewellyn Smith, Clara Collet, and A. L. Bowley-and I may perhaps mention that of my wife and myself-proceeds, to a much greater extent than has before been the case, on essentially the same methods as those followed by the biologist. The social organism, or the particular part of it under investigation, is studied in much the same way as the biologist studies a plant or an animal. Direct experiment is, indeed, excludedvivisection in sociology is not a possible method-but, on the other hand, the sociologist has some help which the biologist lacks, in the comparative analysis of social records, such as rules, reports, cash accounts, etc. ${ }^{2}$

The adoption of what may be termed the biological method in economics and political science--the investigation of the concrete facts of structure and function of actual social organization as it is, and as it has been-facilitates the great specialization demanded for the higher education of the commercial man. Commercial education of the university grade must be intensely specialized. Each class of business requires to be dealt with by itself.

It is useless to appeal to the clerk or the business man as such. The great world of clerks and business men, who seem to the academic student to form a single class, must be broken up. The merchant, the shipowner, the corn factor, or produce broker, and their employees, may, perhaps, form one large group. The insurance clerks, actuaries, and public accountants, who, in London, must number some

[^60]thousands, require something quite different. The great army of railway officials, from the assistant trafic managers down to the youngest clerk in the Railway Clearing House, need yet another kind of instruction. The clerks in banks and finance houses have specialized wants of their own. Finally there are the tens of thousands of clerks and officials employed in the various branches of public administration for whom a distinct curriculum has to be provided. Probably there are several other distinct groups needing separate treatment.

So long as we offered these groups indiscriminately a general political economy as equivalent to commercial education they passed by on the other side, and economics languished uncared for. But put before any one of these classes a definitely specialized curriculum, based on the actual need of the calling, and experience proves that the abler, the more industrious, and the more ambitious of the young men will begin to take an intellectual interest in their occupation, and desire to learn something more about it than they pick up in the office. It is this discovery more than any other circumstance that is giving a new start to economies in London.

It follows that the demand for highly specialized higher commercial education of this economic type will tend to discourage merely abstract lectures, such as those delivered by Cairnes and Fawcett. The instruction in economics and political science in London is destined to become more and more concrete and specialized, dealing with the actual facts of structure and function in social organization.
IX. Economics is now recognized as a concrete science, and as the basis of higher commercial education.

The reorganization of the University of London, now happily accomplished, marks a great advance in the recognition, first, of commercial education as a subject of university study; ${ }^{1}$ and, secondly, of economics and politics as a branch of science, properly so called. During the negotiations for the reorganization of the university, the London county council strongly urged the desirability of making distinct provision for higher commercial education, and offered to contribute a large annual sum toward its cost. At the same time strong representations were made that no modern university could afford to ignore political science as a distinct branch of university study, and that economics could no longer properly be included in the faculty of arts. Further representations were made in favor of the explicit recognition of postgraduate studies and research, and the desirability of allowing students of economics and political science to take degrees in science (the B. Sc. and D. Sc.).

These representations have been completely successful. The new University of London is to be divided into eight faculties-arts, science, law, medicine, theology, music, engineering, and "economics and political science (including commerce and industry)." This is the first time that commerce and industry have been, in England, recognized as subjects of study in a university, and the first instance of the recognition of "economics and political science" as a separate faculty. More significant still is the divorce of these subjects from psychology, philosophy, and metaphysics, which remain in the faculty of arts; the inclusion of the economic and political students among those of science, and the grant to them of degrees in science. We may recall the celebrated "Law of the three stages," of Auguste Comte. Down to the latter part of the eighteenth century economics may be said to have been still in the theological stage. During the nineteenth century its study has been associated with the

[^61]mental and moral sciences, and this may not inappropriately be described as its metaphysical stage. The new University of London significantly divorces economics from philosophy, and places it among the concrete ssiences, thus unconsciously recognizing it as entering upon the positive stage.

Another reform, in which the new university merely follows the example of Paris, is the grant of the degree of doctor of science to graduates of other universities who come to London for research or specialist study. It will henceforth be possible for graduates of other universities to come to London for investigation into economic, political, or social problems, and, at the end of one or two years' research under the direction of the economic faculty, to present a thesis on their work, and if it is of sufficiently good quality, obtain the degree of doctor of science without examination. This opportunity may, it is hoped, encourage economic and political students from other comeries to visit England and avail themselves of its unrivaled facilities for the study of industrial and social developments. There is, perhaps, no more promising method of advancing economic and political science, and at the same time of promoting an entente cordiale between the nations, than such an interchange of graduate students between their respective universities.

The report of Mr. J. Cobden-Sanderson on "The movement of arts and crafts in England;" that of Sir W. de W. Abney, on "Technical education in England;" and that of Mr. Horace Plunkett, on "Technical instruction in Ireland," are able documents, and well deserving the attention of educationalists, but they can be called social only in the sense that all education is social. We shall therefore be compelled to omit their detailed examination, and content ourselves with commending them to general attention.

## United States.

It is greatly to be regretted that the Congrès International de l'Enseignement des Sciences Sociales was unable to obtain a report on the teaching of social science in the higher institutions of the United States. The strong drift in this direction during the past decade is a most interesting phenomenon. That it is increasing is most apparent, and both its cause and its final outcome are problems of the deepest interest to educators and sociologists. In many respects we have gone much further in this direction than any European country. Columbia, Chicago, and several other leading universities, have not been afraid to establish and liberally sustain chairs of sociology, specifically so designated, and to call to them the ablest talent of the country, while nearly every prominent institution for higher education has one or more professors of sociology, either exclusively so engaged or combining it with other social science disciplines, such as economics, history, ethics, etc. The University of Chicago publishes officially a bimonthly magazine, the American Journal of Sociology, founded and edited by the head professor of sociology, Dr. Albion W. Small. At Phladelphia, the American Academy of Political and Social Scionce, which publishes its bimonthly Annals and other matters, is officered and conducted almost exclusively by the professors of the University of Pennsylvania. A number of noteworthy books on sociology have
been coming out of late, written by professors of sociology, and embodying the results of their class lectures. I need only mention those of Prof. F. H. Giddings, of Columbia, "Principles of sociology" and "Elements of sociology;" Small and Vincent (Chicago), "Introduction to the study of society;" Vincent, "Social mind and education;" and Ross (Cornell, Indiana, Stanford), "Social control."

Two reports were presented on secondary and primary instruction in social seience in the United States. The authors of both these reports are connected with secondary instruction in the city of Chicago-Mr. Edward Emory Hill, professor of morals and political economy, at the Hyde Park High School, and Mr. Henry W. Thurston, director of the section of social and economic sciences, at the Chicago Normal School.

REPOFT OF MR. HILL.
The teaching of social sciences in the secondary schools of the Chited States, by Edward Emory Iill.

If we except the subject of history, which, in our public schools, commonly means the chronology of important events and the biography of distinguished perzonages, nearly all of the formal instruction in social science that is provided for in the secondary schools of the United States is given under two heads-civics and political economy. Under the subject of civics, or civil government, attempts are made not only to impart a knowledge of the machincry of government, as embodied in the different political units of the country, such as the city, State, and nation, but also to give some instruction in political and constitutional history, to awaken an interest in questions of political philosophy, and to fix in the minds of pupils some of the fundamental principles of common and international law. The subject of political economy, or economics, is made to include not only a discussion of questions in economic theory, a survey of industrial and economic history, and a bird's-eye view of present economic conditions and tendencies; it also serves as a convenient catchall for instruction in principles of ethics and sociology, whose relation, indeed, to political economy it is not always easy to detect, but which otherwise could find no niche in the high-school curriculum.

It is the object of this paper, first, to show what place civics and political economy have found in the programmes of our high schools; and, second, to indicate the character of the instruction given in these subjects.

In the last Report of the United States Commissioner of Education is a list of the sixteen more important studies of our secondary schools, with the number of pupils pursuing each study, and its percentage to the total number of pupils enrolled in these schools. Neither civil government nor political economy appears in this list. The fact that inve of these more important studies are taken, each by less than 5 per cent and two by less than 4 per cent of the pupils enrolled in these schools, and that no mention is made anywhere in this report on secondary schools of the subjects that we are considering, is a silent commentary on the place that the social sciences have as yet found in the secondary schools of the United States that seems to have in it more of eloquence than of encouragement.

But the situation is not quite so discouraging as it at first seems from an examination of this document. If we turn to the educational reports of the different States we find that 215 out of the 244 high schools reported by Massachusetts offer a course in civil government, and that 77 of those schools provide for some instruction in political economy. In New York State, which has an enrollment in its high schools and academies of 66,342 pupils, 11,509 are reported as having taken an examination
in civics, and 3,012 in economics, during the past year; while in North Dakota these subjects are said to be prescribed in the course of study for high schools by the State board. That these are very favorable examples must be admitted, but they serve to show that the social sciences have secured some recognition in our secondary schools.

Prof. R. Clow, of the State Normal School at Oshkosh, Wis., who has made quite extensive investigation relating to the teaching of political economy, states the folIowing conclusions: First, "that in the New England States, New York, New Jersey, and Pennsylvania there is a tendency to leave economics to the colleges, and that normal schools omit the subject altogether; second, that in the Central States and in Missouri and Colorado, economics is usually taught in the best high schools and normal schools, and third, that in all the old slave States and in the States of the far West it is generally omitted." In accepting these conclusions two facts should be noticed: First, that more than 80 per cent of the secondary schools of the United States are in the States named in his first and second conclusions, and second, that all of the high schools, except four, from which information was gathered are in cities having a population of over 70,000 . According to the reports received by the Committee of Ten on this subject, from many different sections of the United States, it appears that political economy is taught in about 5 per cent of the secondary schools of this country. The number of schools giving formal and specific instruction in civil government is without doubt considerably greater.

A second point to be considered under this head is the amount of time allotted to these subjects and the number of pupils who take them in the schools where they are taught. Professor Clow's table again affords us valuable assistance. He finds that in the schools where it is taught the average time spent on political economy is 14.6 weeks for normal schools and 18.7 weeks for high schools. In the Chicago high schools, where the amount of attention given to these subjects is exceptionally large, civics and economics are both taught in the last year of the course, each rumning about twenty weeks. The number of recitation periods per week is four, each period being nearly fifty minutes in length. No pupil is required to take either of these studies. The number which elects them depends almost entirely on the popularity of the teacher or his reputation for being "easy." During the past year about half of the fourth-year class took civics and economics. As only about half of the pupils who enter the high school ever reach the fourth year, we find that only about 25 per cent of the pupils in the high schools of Chicago receive any formal instruction in the social sciences. But this number is exceptionally large.

The board of regents of the State of New York, in their last high-school bulletin, submitted to the principals of the high schools and academies of that State, for their consideration and adoption, nine courses of study arranged for schools having four years of work. In all of the nine courses we find elementary United States history and civics as one of the studies for the first semester of the first year; in four, civics as a separate subject during the second semester of the first year, and in two, economics as a study during the last half of the fourth year. These courses were arranged aiter a careful study of the working programmes now in use in that State. If they may be taken as reflecting present conditions, this means that nearly all of the pupils in the secondary schools of New York receive a little incidental instruction in civics in connection with elementary United states history during the first twenty weeks of their high-school course, that a few receive special instruction in this subject during the second twenty weeks of their high-school course, and that during the last semester of their high-school career a still smaller number, those taking what are styled the law and commercial courses, can have five hours a week to browse in the field of industrial history and digest a few of the leading principles of political economy.

More to be considered, however, than either of the points that we have touched
upon is the importance attached to these studies by the pupils themselves. The value of a subject from the pupil's standpoint is apt to be closely associated with the amount of credit he can get for it toward graduation or for entrance to a college or university. We may take the Chicago schools again as a type for our study. The credit allowed there for a subject is supposed to represent also the amount of time spent upon it. To graduate the pupil must earn fifteen credits. Of these fifteen credits at least 1.6 must represent mathematics, 1.6 natural science, 2.8 English, 0.8 history, and 1.8 foreign languages. Or he may elect work enough in these different subjects to secure in history 1.6 credits, in mathematics 2.8 credits, in natural science 4 full credits, and in foreign languages 8.2. If we include English with the other languages 11 of the 15 credits required for graduation can be gained in that department alone. But in the social sciences the greatest amount that he can possibly earn during his entire high-school career is 0.8 of 1 credit, and he is not required to study them at all. Chicago, however, as we have seen, is exceptionally liberal toward these sciences.

But if our high-school curriculums seem to be a little stingy in their concessions to the social sciences, what shall we say of the attitude of our higher institutions of learning? Only three out of twenty-eight of the leading colleges and universities in the United States have ever conceded to the study of these sciences in our secondary schools any value whatever as a preparation for their courses within their halls that are supposed to develop a larger manhood and womanhood. If the youth of our secondary schools is to measure the importance of those subjects that are fundamental to the practice of good citizenship by the place they hold in the high-school curriculums, or the value assigned to them by the colleges and universities of our country, what must be his conclusions? And yet we Americans are accustomed to wonder why it is that our educated men do not take more interest in politics.

In the second place, we are to consider briefly the character of the instruction in the social sciences in our secondary schools. "Charity," it is said, "covereth a multitude of faults," but by no possible stretch of her mantle could she hope to hide all the bad work that passes for instruction in civil government and political economy. This, however, is in no way the fault of the civics and economics teachers, for, strictly speaking, there are no such teachers, or very few at most, in our secondary schools. The teacher who attempts to give instruction in these subjects is nearly always the teacher of something else. The Latin teacher who may chance to have a spare hour can "fill it in" by hearing the class in civil government. The mathematics teacher is supposed in some way to have absorbed a sufficient knowledge of the principles of political economy to be able to spend profitably what might otherwise be three or four vacant periods in the week in judiciously instructing a class in that subject. This situation follows necessarily from the fact that these subjects have found so small a place in the programmes of the great majority of our schools.

But even those teachers who are specially interested in these studies and are fortunate enough to be able to devote the larger part of their time to them are as yet far from being satisfied with their success. They feel that they are pioneers in a new field of pedagogy. They find themselves in the midst of a great amount of material from which they must select a litile-that which is likely to be of most value to their pupils as future citizens and which at the same time is best adapted to the needs of their present stage of development. The difficulty of this problem can be appreciated only by those who have attempted to solve it. Many text-books, some of them excellent in a way, have been written on these subjects, it is true, but their writers have shown the same confusion in their selection of the subject-matter that has characterized the work of the teachers. One gives so much space to national government that he has no time left for local institutions. Another becomes so much absorbed in local government that he seems to forget that he is also a citizen of a great nation. Some have plunged into the history and philosophy of our
social organisms. Others hare contented themselves with a bare description of the machinery of our various governments. In the field of political economy the textbook situation has been even worse. With one or two very poor exceptions the only text-books on this subject that have been on the market for use in secondary schools were spoiled abridgments of works prepared primarily for colleges. It is only recently that a desire to produce text-books on political economy suited to the needs of the secondary school seems to have become epidemic among students of economics. The results are full of encouragement to those who believe that political economy should receive respectful attention in our high-school progxammes. They are not only the substance in part of things hoped for, but also, we trust, the evidence of things not yet seen. To sum up, then, we find, first, that in the United States the teaching of the social sciences has not as yet found a very important place in the work of the secondary schools; that they are taught in a comparatively small number of these schools, and that in the schools where they are made subjects of instruction they are usually elected studies taken by only a small number of pupils and receiving little time and attention. In the second place, we have found that the character of the instruction in these subjects is for the most part very poor; that not many of the teachers who are compelled to "hear classes" in these branches are interested in them or know much about them, and that the few instructors who devote themselves with zeal to this line of work labor under serious disadvantages.

These facts, however, are stated in the spirit of truth and honesty, and not with any feelings of pessimism or despair. The movement in this country to put the study of the social sciences down into the secondary and elementary schools is still in its infancy. We believe, too, that it is a healthy, growing infancy. As encouragement for this belief we find that each year an increasing number of schools is introducing them into their programmes and that other schools are giving them a larger place in their curriculums; that their importance is being emphasized by frequent discussion in teachers' conventions, in educational journals, and in the public press; that their study is being made compulsory in some of our best normal schools, and that the colleges and universities of our country, which formerly assumed an attitude not only of indifference, but of hostility, toward their introduction into the public schools, are now swinging into line, not only giving them some recognition as preparatory work, but also strengthening their own courses in these departments, with a view of sending out better equipped teachers into this field.

REPORT GF MR. THURSTON.
The teaching of social sciences in the elementary schools, by Henry W. Thurston.
A.-THE DEMAND.

Although later in time than the demand for the teaching of social sciences in secondary schools, still the demand for such teaching in the elementary schools of a democracy is just as logical and inevitable. Already this demand is beginning to make itself heard in the United States.

The most exhaustive discussion of the advisability of such teaching is that of Prof. Edmund J. James, of the University of Chicago, entitled: "The place of the political and social sciences in modern education and their bearing on the training for citizenship in a free state." (Annals of the American Academy, Vol. X.)

In this monograph a parallel is drawn between the social sciences on the one hand and the natural sciences on the other, and it is argued that, just as the study of the physical sciences has entered our educational system through the university, and has been pushed downward through the college and secondary school into the elementary school in the form of "nature study," so the study of the social sciences must find its way downward through the whole system.

The thesis of Professor James, in his own words, is, "that the political and social sciences, or perhaps better, that the subject-matter of the political and social sciences must be utilized for purposes of education or instruction in all grades of our educational system, from the university to the kindergarten. I mean that politics and economics, using those terms in the largest sense, or that the subject-matter of those sciences must become a constituent part of the educational curriculum, using that term in the largest sense, of our system of intellectual, political, and industrial training." (p. 361.)

Two other important discussions of the same general problem should be mentioned here, namely, the monograph entitled "Training for citizenship," by J. W. Jenks, of Cornell University, published in the Supplement to the Second Year Book of the National Herbart Society, 1896; and a discussion of the same topic by Messrs. E. J. James, C. C. Van Lieuw, J. W. Jenks, Frank McMurry, Louis Galbreath, H. M. Slauson, O. T. Bright, and Frank Dixon, in the Supplement of the Third Year Book of the same society, published in 1857.

It may be said further that during the last ten years the interest of educators generally, and to a less degree the attention of thinking men and women has been turning toward the problem of a better preparation of boys and girls for the inevitable duties and responsibilities of citizens in a representative democracy, and what is far more necessary, for intelligent and genuinely social community life under urban conditions.

As this new interest in social education has come first through a consciousness of the political incompetency and venality of many of our voters, it has naturally enough resulted in some quarters in an effort to have special civic instruction given in the elementary schools. So far as can be ascertained, this effort began with individual teachers, principals, and superintendents in different parts of the country, but it is now becoming organized on a larger scale. For example, the regents of the State of New York now practically require candidates for diplomas from the public high schools of that State, from which class the elementary teachers are largely drawn, to pass an elementary examination in civics. The city of Chicago, Ill., has also begun to demand evidence of some special civic knowledge from candidates for positions as elementary teachers and principals. In the State of North Dakota likewise candidates for a county teacher's certificate must pass an examination in civics, and candidates for a State certificate an examination in both civics and economics. Doubtless similar demands are also made elsewhere and will soon become quite general. In fact although comparatively little has yet been done to satisfy this new demand for a better social education, it is gradually becoming evident to thoughtful persons that the demand itself is inherent in our democratic American life and consequently that the demand is bound to find expression. Even now it may perhaps be said with truth that the chief problem in the United States is not how to develop a consciousness of our need for a better social education, but rather how to give in a genuine and vital form that socializing education that we already feel ourselves to need.

> B.-EFFORTS TO MEET THE DEMAND.

For a long time in the United States it was generally supposed that the public school system per se was in some genuine but unanalyzed way able to prepare all children for democratic citizenship. As soon as this proposition began to be doubted in some quarters naturally enough the first conscious attempts to give a better social education were made along the line of a purely political education.

The method at first used consisted in pushing down into the higher grades of the elementary schools, from the college and the secondary school, the same system of analysis and dissection of the Federal constitution that had been customary in those higher institutions. By this analysis it was hoped to give that special social educa-
tion called preparation for citizenship which the public-school system of itself had failed to give.

Even this education, in the few schools into which it was introduced, was given only in the sixth, seventh, and eighth grades, to which only a comparatively small number of the elementary school pupils ever attain. Here is a summary of replies given by fifty persons, living in twelve different States, but most of them connected with secondary education. Some of the replies are applicable also to elementary schools, and thirteen apply exclusively to them.

In reading this summary of replies received one can get some idea of the end these methods have in view and of the results already obtained from the teaching of civics in the elementary and secondary schools.

1. Economics as a separate discipline is attempted in no one of the grade schools reporting.
2. Civies is taught in more secondary schools than is economics, and in the schools which offer both subjects civics is taught, on the average, for more periods to a larger per cent of all the pupils than is economics.
3. There is a distinct preference given in the answers, as a whole, to methods which allow more than one book, encourage study of local, political, economic, and social facts, and promote discussion; in short, methods which attempt to connect the subjects with the immediate environment of the pupils rather than to confine them to the mere text-book study of political and economic theory.
4. Very little definite knowledge of the effects of right civic knowledge upon the civic action of public-school pupils is shown by those who answered the questions. The assumption, however, is quite common that an intellectual grasp of the facts about good citizenship will somehow, as a rule, lead to the practice of good citizenship by those who know such facts.
5. The answers show a general conception of the importance of the discipline of the school in training young people to be good citizena, but in comparatively few instances is any eridence given to show that the discipline maintained is training for citizenship in a democracy rather than for citizenship in an autocracy.
6. Opinions are very diverse respecting the ability of students to run their own clubs, athletic associations, etc.
7. There is comparatively little emphasis put upon the value of these voluntary associations in training for democratic citizenship.
8. The questions respecting the share of pupils in the larger civic life of the community were frequently ignored, often misinterpreted, and sometimes answered facetiously. Comparatively little conscious connection between school life and the community life as a whole was revealed.
9. The conseasus of opinion is gencral that training for citizenship is a matter of fundamental importance in the United States just now, and the belief-perhaps the hope, rather-is frequently expressed that the infuence of the whole public-school system is in the direction of good citizenship, but, nevertheless, some fear creeps in lest, in spite of all, the real training of the schools may tend toward the ideals and practices of the political boss and partisan politics rather than toward genuinely good citizenship. ${ }^{1}$
in order to gain further information about the methods of civics teaching, and some idea of the degree to which it was taught in the different grades of the elementary schools, a second inquiry was made, to which came 75 answers from 22 different States, 35 of the answers being from persons now comnected with elementary schools, and several more from persons who at some previous time had taught in such schools.

From these answers it is clear that formal civic instruction has gained at least a

[^62]foothold in some elementary schools of most of the Northern States of the Union and of a very few of the Southern. The grades in which such instruction is offered, in the schools from which replies were received, are as follows: Twenty schools teach civics in the eighth grade only; 9 schools teach civics in the seventh and eighth grades; 6 schools teach civics in the sixth, seventh, and eighth grades; 2 schools teach civics in the fifth, sixth, seventh, and eighth grades; 3 schools teach civics in all the grades. ${ }^{1}$

As a whole, these replies show that what Professor James argues for so conclusively (in the monograph before cited), namely, that the subject-matter of civics and economics should be taught in all grades of the public schools, is already, so far as civics is concerned, attempted in at least a few isolated schools, and that there is some tendency toward this end in other schools.

Again, in the same inquiry, in answer to the question, "How early should civic instruction begin?" the replies point still more strongly in the same direction. These replies are as follows: Twelve persons think civics should be taught in all grades; 3 persons think civics should be taught informally in the first grade and formally in grades 6 to $8 ; 4$ persons think civics should be tatght in grades 3 to $8 ; 1$ person thinks civics should be taught in grades 4 to $8 ; 3$ persons think civics should be taught in grades 5 to $8 ; 9$ persons think civies should be taught in grades 6 to $8 ; 6$ persons think civies should be taught at 10 years of age; 5 persons think civics should be taught from 12 to 14 years of age; 2 persons think civics should be taught only in the high school; 2 persons think civics should be taught only when the child is adolescent.

The various methods for beginning the study run as follows: Orally, 11; with a book, 2; through field work, 5; current events, 2; study of home, city, 8; school government, 10 ; from an ethical point of view, 2 ; by giving proper conceptions of privileges and rights of property through school life, 3 ; in connection with geography and history, 1; by study of occupations, 1; by study of biographies, 4.

Another hopeful sign for better social education of a political sort is seen in the recent publication of several.text-books that are better suited to the nature of children than any that have heretofore been written. Among these special mention should be made of three: (1) Willoughby's The Rights and Duties of Ameriean Citizenship (American Book Company, New York); (2) Forman's First Lessons in Civies (American Book Company); (3) Dole's The Young Citizen (D. C. Heath \&o Co., Boston).

The intelligent use of books like these, supplemented bỳ a great deal of observation and discussion of the special functions and forms of organization of the local political units that touch the life of the child at so many points, can hardly fail to develop citizens who possess a genuine social conseiousness and intelligence.

Such instruction needs only to become vitalized by bringing it one step nearer the child by socializing his habit as well as his intelligence. What is wanted is to secure his active cooperation in making the school community "an ideal community," in socializing his games, clubs, societies, ete., and in making his own town all that it may be, in shori to socialize him with reference to every group of which he is a member. In a few places in the United States there is already promise of work of this character in the elementary schools. The work halts in general only because teachers who are able to do such work are not yet numerous.
From the facts set forth in this paper, from further information of a similar character obtained in answer to the inquiries before mentioned, and from personal experience, observation, conference, and correspondence it may be said in conclusion, and to summarize: .

1. The demand for a genuine social education that will take hold on both the habit and intelligence of the normal child in the elementary school in small and local matters as well as in national affairs is inherent in our ideals and institutions, and is
already beginning to find both scholarly expression and an intelligent hearing in the United States.
2. The conscious efforts to give such a social education in the elementary schools are thus far confined almost entirely to the teaching oi civics only in the seventh and eighth grades of a very small per centum of the total number of such schools. Almost no attempts are yet made to give any specific economic instruction in the elementary schools. All carefully conceived social instruction of whatever sort is as yet confined to those schools and those school systems which happen to be under the control of unusually progressive men.
3. Chaos in method still prevails. The majority of teachers doubtless continue to lay special emphasis upon the analysis and discussion of the Federal and State constitutions. Still there are some signs that a few teachers are preparing themselves to lead the way in the task of developing a pedagogy of social good wiil, social habit, and social intelligence. Such teachers are making use of the school community life on its active side, of the games and voluntary organizations of the children, of the concrete functions of various local political units that touch the child's life on every side, and of the great universal facts of the industrial interdependence of men and women of different occupations, in such a way as to work a gradual socialization of the child in act, purpose, and intelligence. Upon the possibility that these few sporadic cases of good social teaching may slowly become contagious and epidemic depends the future progress of an adequate teaching of the social sciences in the elementary schools of the United States.

## FUTURE OF THE CONGRESS.

In the above somewhat extended treatment of the important International Congress on Instruction in the Social Sciences I have purposely reserved to the last the report of Mlle. Dick May, secretary of the congress and general secretary of the École des Hautes Etudes, under whose auspices the congress was organized, and largely through her intiative. Education in France, and also the international educational and social movement, owe much to this intelligent, public-spirited, and enterprising woman, who seems possessed of unlimited activity and energy coupled with great practical executive ability. Her report, which is brief and to the point, and purports to relate to education in France, under which country it might have been logically treated, is really of a much broader character, and, as will be seen, led to such important results, that it properly forms the transition to our next subject and may fittingly conclude the treatment of the congress. It was the last to be presented, on August 2, and was discussed at length, especially the series of propositions or desiderata with which it concludes. These latter were taken up systematically, discussed, somewhat amended, and formally adopted by the congress, resulting in converting it into a permanent international body, the character of which will be set forth later. The following is the report:

Creation of a system of international social instruction in France, by Mlle. Dick May.
This paper can not be a report. The very terms of the question submitted to the congress, "Creation of a system of international social instruction," preclude the idea of an investigation of definite realities or an account of experiments realized.

Moreover, my friend, M. La Fontaine, was able to point out to us the importance of the question under consideration by explaining to us the distribution and functions of the chairs at the Institut des Hautes Études de Bruxelles, and there is no one of us, I think, who is not ready to applaud the partial success of the efforts made under the most unfavorable circumstances to inspire good will at all hazards and to preserve or restore harmony of action.
It is this perpetual clement of uncertainty in the organization of international social instruction that I would eliminate, or at least reduce to a minimum, by the presentation of the project which I venture to submit to the deliberations of the congress. The framing of this project was not an altogether easy task, and I do not see to-day how I could have conceived it a few months ago. I add in all humility, that when I asked the committee of organization to add this fourth point to the programme I did not exactly realize what I was asking, nor the difficulty of carrying out the project that I hoped to result from the discussion. After a more thorough study of the data of the problem and the further reduction in the number of possible solutions during the eighteen months that have elapsed since the drafting of the programme, I have finally formulated for my own edification two series of observations, of which the following is a summary:

1. If there is to be a system of instruction susceptible of wide diffusion, and whase cosmopolitan unity, if I dare so express myself, is of a nature to interest the educators as well as the sociologists of all countries, this is certainly what it has been sought to establish for several years in the domain of social science. It is not at all a question, it is necessary to say, of adopting a grammar or a catechism, nor of placing at the disposition of a new school the golden thread of general rules among the scattered pearls of authorized exceptions. The object, infinitely more simple, would be to bring to light and to cause to be appreciated the conclusions drawn, no matter from what source, by certain rare observers, as to the theory and practice of societies. Temporary and partial conclusions, slow and difficult studies, a rather limited scientific personnel, teaching body still more limited; would it not be opportune to facilitate study by an exchange of hypotheses, by a comparison of conclusions, by association, by the perpetual variation of experiments to be applied and of ideas to be adopted, to prevent them from becoming laboratory experiments and academic ideas? Everything that is called social ought to be first human, and everything that is human ought to be conceived or foreseen to be international. But all the rightminded people of the universal élite have now given their adhesion to international social education.
2. The first thing is to localize this organization, to give it not methods, which would interfere with its flexibility and its variability, but a material center and tangible seat on definite soil, benches, a desk, and a roof.

The École des Hautes Études Sociales ${ }^{1}$ was recently founded to study, in their extreme complexity, the totality of social questions. For the purely theoretical instruction given at the Institut des Hautes Etudes of Brussels, at the Instituto Cesare Aliferi of Florence, at the Collège Libre des Sciences Sociales of Paris; for the more specially economic and political teaching of the École Libre des Sciences Politiques of Paris, and the School of Economic and Political Sciences of London, it proposes to substitute a more purely and directly social instruction, not at all hostile to theory (which occupies a considerable place in its programme), but broadly open to the immediate and real study of those social questions which the wants and sufferings of human beings, the eternal and painful aspirations of man after happiness imperatively thrust home to the quickened conscience of society. The École des Hautes Études Sociales in its moral section resolutely attacks these problems of education and control, the solution of which for several years has seemed to be unfolding itself to the researches of western Europe. In its social section, properly so called, with its exercises prepara-
tory to popular instruction, with its studies in labor organization, with its practical courses in hygiene and mutual aid, in "cooperation and mutuality," with its union of professors, laborers, and students, associated in a common task, it plunges into the very realities of social life. Finally, its third section does not content itself with studying in its origin or its special legislation the primary social fact of the weighty influence of the press of our time. It will endeavor to disentangle and define the conditions of professional preparation and practical education by which the journalist of the twentieth century, safe in his work, proud of his independence, conscious of his worth, will henceforth live by his profession without bargaining either his pen, his name, or his ideas.

The school has much space at its disposal and an administration familiar with the material details of organization. Perhaps it could place an office at the disposal of the permanent international committee, whose appointment I propose to the congress. Perhaps it could open its lecture halls and its library to teachers from all countries who shoud testify a desire to lecture there during the summer months from Easter to the November opening. And, if I may express myself conditionally, having no claim to express myself otherwise, I have at least every reason to hope that a request addressed to the director of the school would be kindly received.

The project proposed at the conclusion of this report, as amended and adopted by the congress, embraced the following articles:

Auticle 1. The International Congress for Instruction in the Social Sciences shall meet every two years. The place of meeting of each session shall be fixed at the preceding session by a vote of the congress.

Art. 2. A permanent intermational committee shall transact the business of the congress in the interval between the sessions. This committee shall be located in Paris in the rooms of the École des Hautes Études Sociales. It shall choose its officers from among its members, who are subject to reelection at each se-sion of the congress.

Art. 3. International social instruction shall be organized in all the countries that shall request it of the committee. Thepermanent committee is charged with facilitating the international circulation of the teaching body.

Art. 4. The establishing of an international social fund is intrusted to the care of the permanent committee.

## THE ÉCOLE DES HAUTES ÉTUDES.

Before passing to the consideration of the permanent Congress of International Instruction in the Social Sciences, as thus constituted, it may be well to say a word relative to the almost equally new educational institution under whose auspices it was formed and with which it is to be so intimately associated, viz, the Eeole des Fautes Etudes Sociales at Paris, of which some account is given in M. Gide's report; but since his report was written it has taken more definite shape, and started on its career a short time after the congress closed. The organization and programme of lectures were drawn up in the form of a circular of announcement and distributed to the members of the congress during the session. The board of administrators consists of MM. Félix Alean, the publisher; Charles Guieysse, and Georges Sorel. The council of directors has for its president M. Emile Boutroux, of the Institute, and counts among its 55 members such men as Berthelot, Espinas, Fonillée, Gide, Anatole Leroy-Beaulieu, Seignobos, Sorel, and Tarde. The director is M. Emile Duclaux, and the general secretary Mlle. Dick

May, who was also the secretary of the congress. As stated by M. Gide, it embraces three schools-morals, social science, and journalism. The president of the School of Morals is M. A. Croiset; and MM. Marcel Bernès, Émile Boutroux, Charles Gide, and Gabriel Tarde are among the members of its council. The president of the School of Social Science is M. Emile Duclaux, and its council includes thirteen leading sociologists. M. J. Cornély is president of the School of Journalism.
The programme of all three of the schools is given in full and is very attractive. Most of the persons above named are among the lecturers, but there are many others. We note those of M. de Roberty, who gives a course on Frédéric Nietzsche; of M. Xavier Léon, whose subject is the life of Fichte; of M. G. Séailles, social philosophy; of M. Georges Dumas, origin of positivism.

## THE COLLEGE LIBRE DES SOIENCES SOCIALES.

Before leaving the general subject of social instruction in France, it may be well to mention also the somewhat older, but still young, Collège Libre des Sciences Sociales, founded in 1895. Its programme for the current scholastic year (1900-1901) is also before me. Dr. Delbet, president of the congress, is its director. He is a positivist without disguise, and gives a course on sociology according to Auguste Comte. The programme is full and varied, and in the truest sense free. Mr. Félix Le Dantec treats the important subject of biology applied to sociology; M. Jacques Bertillon, that of demography; Mr. KellesKrauz, that of sociologie marxiste; M. Maxime Kovalevsky, that of the coonomic situation and social doctrines of France in the second half of the eighteenth century; M. Albert Métin, that of the history of labor, ete.

PERMANENT INTERNATIONAE CONGRESS FOR THE TEACHING OF THE SOCTAL SCIENCES.

As already stated, the temporary congress of the Exposition resolved itself, on August 2, into a permanent congress with biemnial meetings. It also at the same time created a permanent international committee to transact its business in the intervals between the meetings of the congress. This committee was constituted as follows:

President: M. Emile Duclaux, honorary president of the congress, director of the École des Hantes Etudes Sociales de Paris.

Vice-presidents: Germany, Professors Barth, of Leipzig, and Lexis, of Gottingen. Belgium, Hector Denis, deputy and professor at the Université Libre de Bruxelles; Henri La Fontaine, senator and professor at the Université Nouvelle de Bruxelles; Ernest Mahaim, professor ordinary at the Université de Liège; Eimile Vandervelde, deputy, professor at the Université Nouvelle de Bruxelles; Bimile Waxweiler, chief of the bureau of labor, lecturer at the Université

Libre de Bruxelles. United States, Simeon E. Baldwin, judge of the supreme court of errors of Connecticut, professor of constitutional law in Yalo University; Lester F. Ward, geologist of the United States Geological Survey. France, Alfred Croiset, member of the Institute of France, dean of the faculty of letters of the University of Paris; Charles Gide, professor at the University of Montpellier, lecturer in the faculty of law of Paris; Alfred Fouillée, member of the Institute of France. Great Britain, James Bryce, M. P.; Patrick Geddes, professor at the University of Dundee; Horace Plunkett, vice-president of the Ministry of Technical Education for Ireland; Michael Sadler, director of the Board of Education Library of London. Italy, Enrico Ferri, deputy, professor in the University of Rome; Achille Loria, professor in the University of Pavia; Luigi Luzzati, former minister. Russia, Maxime Kovalevsky, former professor at the University of Moscow; Eugene de Roberty, professor at the Université Nouvelle de Bruxelles and at the Ecole des Hautes Ettudes de Paris; A. Tchouprov, professor in the University of Moscow.

General secretary, Dick May, general secretary of the Ecole des Hautes Études de Paris.

The permanent committee held its first meeting at No. 16 rue de la Sorbonne, Paris, on the 17th of December, 1900. It decided to publish as a volume the various reports submitted to the congress, to take steps to provide for the resources of the congress, to call for propositions from collaborators as to the proper course to pursue, etc.

The congress was hospitably received by the Ecole des Hautes Etudes, and comfortable quarters were furnished for the sessions and for the transaction of its current business. It is too early to speculate as to what the movement signifies for the future.

## The Congress of Social Education.

Next in importance for our purpose must be classed the Congress of Social Education, which was originally called for the 6th to the 9 th of September, but which was obliged to hold its sessions just twenty days later, i. e., from the 26 th to the 29 th.

To judge from the title alone of this congress and that for the teaching of social science, which we have been considering, it might be supposed that they would conflict somewhat, or at least cover much of the same ground, but, as we shall see, this was not the case, and the real object of the two congresses was quite different. Social education (éducation sociale) does not well express the purpose of the congress so named, at least not when thus literally translated into English. But it must be remembered that the word education has a different meaning in French from the usual English sense of that word. The fact is that in our tongue it is an ambiguous term, and includes not only the French meaning of the word but most of what
the French imply in the word "instruction." But, unless explained either expressly or by the context, it is this latter alone that is commonly understood by education in English usage. The French, however, draw the distinction sharply, and advertisements may be found in the French newspapers for the private instruction and education of young persons. The reader does not need to have this distinction further pointed out, and it is still wider between éducation and enseignement (teaching), which is the term that specially characterizes the functions of the congress to which we have been devoting so much attention in the foregoing pages.

But aside from this diference between precept and example, between the infuence of the active personal instructor with his pedagogic aphliances and the intelligently organized enviromment exerted in a thousand subtle and nameless ways in building up and rounding out mind and character, the Congress of Social Education had a special and well-defined function and purpose, and it was this that its organizers sought to express by the word social. In English, at least in America in our times, this conception is habitually conveyed by the term "civic," and it is possible that the expression "civic education" may be a better translation of the name of the congress than the usual one of social education. But all this will be fully brought out by the documents issued by the congress and by such an insight into the results accomplished as space will enable us to present.

The original announcement issued in 1899 was in a circular of the customary form, and is as follows:

INTERNATIONAL CONGRESS OF SOCLAL EDUCATION.
Political and social discussions that have been agitating men's minds since the middle of the nineteenth century have gradually resulted in one idea which has received the assent of very different minds, viz, the idea of a sócial kond existing among individuals, and of their mutual responsibility in social matters.

Hence the necessity of determining, both from the data of experimental science and with a view of satisfying the idea of justice, the conditions of association to be voluntarily established among all men; and this not merely for the determination of political rights and duties, but also and especially for defining the rights and duties which affect the material and moral life of individuals, the legal status of the family, the organization of labor, and, in a word, for the definition of social rights and duties.
To make this new idea penetrate the mind-to bring about, in short, the education of the social sense of humanity-is the task which henceforth devolves upon those who seek a peaceful solution of the social problem.

The search for the means to this end is the object of the effort which we here propose. According to the programme drawn up by the committee of initiation (groupe d'initiative) for social education * * the first question is to ascertain the present state of opinion on this subject, and then to decide upon a method to follow in order to insure to all individuals this education. The committee of initiation proposes * * * the organization of a special exposition which shall furnish the greatest possible amount of information. In order to complete its action and prepare for the work of the future we have undertaken to bring together in a special congress at the Universal Exposition of 1900, all those who can to any extent cooperate in the
work of social education, and we ask their assistance in the preliminary investigations, at the congress itself, and in the subsequent prosecution of the work.

In order that social education may be rational, it is necessary first of all that special investigations determine a method for it, thus far little known and badly defined. The method must include, first, observation, the ascertainment of facts, in order to acquire a clear view; thus their existence is made known. Then account must be taken of the principles that they teach, the laws that govern them; thus their philosophy is made known. Finally, it is necessary to examine the practical consequences that flow from them, and thus to complete the necessary theoretical knowledge.

The method once established, the work of educators consists in disseminating it, in preserving, in the knowledge acquired, the same course and the same order that have led to its adoption.

Social education will thus become a means of bringing individuals to a knowledge of social facts, of fixing the idea in the mind, of calling forth in consciousness the sentiment which determines action conformable to the ideal adopted; finally in sufficiently strengthening this idea and this sentiment by constantly repeated action to secure the complete formation of what might be called the social sense, i. e., to secure action that has become unconscions through acquired habit.

This procedure will constitute the necessary practical means of making possible at a later date a complete education. Education is not really attained unless the individuals, by a sufficient study, have arrived at a clear idea of what is true. This idea is then sufficient to determine their choice and their action, but in the present state of average intelligence it is necessary, by an immediate practical activity determining customs and shaping new surroundings, to lead on further progress to a point where a full knowledge of social truths shall be acquired by all the individuals composing society.

In order to obtain such a result, it will be necessary to arrange the studies under three different grades: (1) Questions of general method tending to establish the theory of solidarity; (2) means of diffusion or propaganda wherever the education of individuals can be assured; (3) means of applying whatever the work of collective activity may represent.

We have accordingly adopted a programme embracing these three divisions: theoretical ideas, means of diffusion and instruction, efforts for application. (This programme is inserted at the end of this circular.)

We urgently request you to identify yourself with this congress of social education, the work of which can be made so important for the development and progress of hu nanity.

You can see by the programme itself that a vast field is open in which there is work for men of all capacities. Thinkers and men of action, all may bring their aid to it. The first part appeals to scientific minds, philosophers, in the study of a doctrine of high social import; the second part should attract all those who can perform a part in the education of a people: teachers, professors, students, public-spiried citizens; the third part is addressed to all those who are already taking, or are ready to take, an active part in laboring for the greatest good of the future.

Identification with the congress involves no obligation. A fee of 10 francs once for all has been decided upon to defray the expenses of organizing the congress.

The committee of organization will limit the discussion to the lines announced in order to avoid duplication as far as possible; it will neglect nothing in order to bring out at this congress a very complete expression of the social thought at the opening of the twentieth century, but in order to accomplish that object it needs your cooperation and the support of the wise and the devoted everywhere.

This circular is signed by M. Léon Bourgois, president of the committee of organization; the two vice-presidents, Senator Jules Sieg-
fried and M. Etienne Jacquin, councillor of state; by M. L. Mabillear, director of the Musée Social, general reporter; by the secretaries, Mme. Anna Lampérière (general secretary), M. Marcel Charlot, chief of bureau at the Ministry of Public Instruction, and M. Ch. Favaron, president of the Trade Syndicate of Carpenters; and by the treasurer, M. Etienne Charavay.

The committee of organization was constituted as follows: MM. Briat, secretary of the Syndicate of Instruments of Precision; Buisson, director of the Painters' Association, Le Travail; Buisson (Ferdinand), professor in the faculty of letters of Paris; Catusse, Minister Plenipotentiary at Stockholm; Chaufour; Dumarousen; Dumay, controller of the labor bourse; Fontaine (A.), subdirector of the office of labor; Geffroy (G.), publicist; Giry, member of the Institute, professor at the École des Chartes; Keufer, president of the Féderation du Livre; Lavy, formerly deputy; Letourneau (Charles), professor at the Ecole d'Anthropologie; Manouvrier (Dr.), professor at the Ecole d'Anthropologie; Mayniex, member of the Paris Typographic Syndical Chamber; Papillault (Dr.), preparator in the Laboratory of Anthropology; Ramet (A.), avoué près le tribunal de première instance; Romanet; Seignobos (Ch.), maître de conférences at the Faculty of Letters; Siegfried (André), student of law; Tissier (Th.), auditor to the council of state; Vel-Durand, councillor of state; Viturat, president of the Syndicate of Shirt Cutters; Wulff, publicist.

## Programme.

## i. General method.-obsective stuly or social facts.

1. Establishment of the facts of natural solidarity:
a. Phenomena of interdependence-

In nature (family, heredity, epidemics, climate, etc.).

- In history (groupings of races, classes, countries, opinions, etc., according to external conditions).
b. Analogous social phenomena-

Facts of hygiene (public health, diseases, infirmities due to the bad distribution of labor, charges for medical attendance, etc.).
Economic facts (production, consumption, strikes, public works, ete.).
2. Theoretical and philosophical study of social solidarity:
a. Foundation of the idea of solidarity, its nature, its limits, its relations with the idea of liberty and with the idea of justice.
b. General laws that govern the relations of social beings, conscutive sanctions.
3. Consequences of the law of solidarity applied to social relations among individuals:
a. Differences of appreciation and of opinion according as one is an individualist or a solidarist. Advantages of solidary (collective) action; the interests of individuals are harmonious and not opposed; necessary substitution of the idea of solidary (collective) struggle of men for existence with external obstacles, for the idea of individual struggle between men.
b. Influence of social education on the organic character of society. Need of this education in order to arrive at right founded on the principle of justice.

1. Diffusion of ideas of solidarity; theoretical and objective teaching:
a. Duties, readings designed to make known the facts of solidarity, then the principles which govern them and the laws that result from them.
b. Application to the existing facts in the school, in the family, in the general environment.
2. Development of social sentiment:
a. Practical action conformable to the principle of solidarity; organization of temporary groups and with a special object.
b. Enforcement of solidary action in these groups; encouragement of private initiative, of the recognition of abilities brought out by circumstances, etc.
3. Exercise of the social sense:
(1. Organization of groups of children and men for all (ases in which solidary action can be efficacious.
4. Creation of an environment in which the individuals shall have to act from a social interest; to practice an exchange of services, solidarity between strong and weak; to learn the mechanism of collective action; to acquire administrative experience, the knowledge of capacities, the voluntary acceptance of the opinion of the largest number-in a word, all that conduces to the intelligent organization of free individual initiative.
c. The putting into practice of solidarity in all matters of social life in which individual initiative can be exercised; education of the less informed by the better informed; solidarity in the family, in the regiment, in work, in production, in consumption, in mutual aid, etc.

> IIF. PRACTICAL IPPLICATIONS.

1. General characteristics of collective work:
a. Denominational propagandist work; its special conditions.
b. Works of charity; distinction from works of solidarity.
c. Works of solidarity; organization, social efficiency.
2. Examination of work now going on; progress attained:
a. Pure practical work (aid, orphanages, dispensaries).
b. Practical educational work (student and alumni associations, mutual aid associations, syndicates, federations, cooperative associations, etc.).
c. Theoretical propagandist work (lectures, libraries, journals, reviews).
3. Conditions to be established for the improvement and perfection of the operation of collective work:
a. Conditions relating to the founding and alministration of such work.
b. Nature of the progress to be realized through the initiative of citizens.
c. Works to be founded in order to complete the sum total of collective operations necessary for social education.
The folowing is the "questionnaire" which was prepared by the committee of initiation and sent out in the spring of 1900 to educators and chiefs of educational institutions:

What works are recommended for making known the principles and facts of solidarity?

Primary instruction: Readings, dictations, compilations, phrases for written exercises, etc.

Secondary instruction: Compositions, translations, various exercises.
Higher instruction: Public lectures, theses defended, publication of books, articles, reviews, or memoirs.

Attempts at effective cooperation (solidarization) of students, in the class, in the school, in the lyceum or the faculty.

Collective rewards and punishments; generalized responsibilities, disciplinary measures, etc.

Temporary groups for a single purpose to be dissolved as soon as the result is attained

Provisional agreements for a definite object; exchange of services called out under given circumstances, etc.

## Permanent organized groups.

Whether in the school, the lyceum or the faculty (cooperation for the purchase of school furniture, sewing materials, models for drawing, library books, laboratory instruments, materials for trying experiments, etc.), or outside of the school (mutual associations with or without capital; student and alumni associations; associations common to different orders of instruction, etc.).

EDUCATIVE EFFECTS OF THE GROUPINGS.
From the point of view of-

1. The acquisition of ideas of effective solidarity among living beings in society (collective effect of mistakes or of acts useful only to one individual-injuries experienced directly by all through the misfortunes which befall one of the members of the group or association, etc.).
2. Administrative experience (management of interests by those interested, control, discipline, etc.).
3. Recognition of abilities (choice by students themselves of the directors of plays, of temporary supervisors, of treasurers, of representatives, or chiefs in whatever capacity, etc.).
4. Acceptance of the decision of the majority (submission to the result of a vote, discipline of propaganda, etc.).
5. Exchange of services, whether organized in a regular way or not.

## MATERIAL RESULTS.

From the individual point of view: Results secured by an associate from his arsociation with others.

From the collective point of view: General results secured by the totality of the associates.

These several documents bring out in a clear light the essential difference between this congress and that for the taching of social science. Here the fundamental idea is that of solidarity. This word solidarity, primarily a legal term signifying joint liability in business, has received its present broader meaning within the past half century, first in France, but now become cosmopolitan, so that it searcely requires definition in any language.

The congress met as stated, and held regular sessions to receive and discuss the various reports presented, some of which were of great value. Owing to the postponement above mentioned it conflicted with the sessions of the International Institute of Sociology and made it impossible for me to attend it, and I found it very dificult to acquaint myself with its results. One of the reports was made by M .

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Emile Durkheim, professor of sociology in the Faculty of Bordeaux, editor of the Année Sociologique, and author of important works on the division of labor, suicide, and other sociological subjects. M. Durkheim represents a particular school of sociology which makes a much larger claim than any other for the independent character of society as against the individual, and he has emphasized with great power the paramount importance of association as the fundamental fiact of civilization. His paper was on the rôle of the university in the work of social education.
M. Jules Payot, inspector of the Academy of the Marne, dealt with the question of primary instruction, and M. Giraudeau with that of secondary instruction in this new art of social solidarity. A number of resolutions (vœux) were adopted with a view to giving a definite expression to the leading ideas entertained by the members of the congress.

On motion of M. Darlu the congress resolved:
That in the training of teachers for the secondary schools and in all examinations, whether literary, scientific, historical, or philosophical, a prominent place should be given to questions of social morality.

That in secondary education (lyceums and colleges for boys and girls) the teaching of morals should assume in a very marked manner the character of instruction in social morality founded upon ideas of solidarity and social justice.

That a chair of social education should be created at the higher normal school.

On motion of M. Durkheim it was roted that it is desirable that courses in social cconomy be multiplied in the universities.
MM. Payot and Petit proposed and the congress agreed: That children and adolescent persons should be more and more trained in matters of mutual aid, association, patronage, etc., in tests of personal and collective initiative, and in voluntary concerted action; that alumni associations of State lycées and colleges and student organizations should become centers of educative action, should utilize their capital in the form of loans on honor in favor of university chapters; that alumni associations of universities, lycées, colleges, and schools should take more and more the direction of social action toward the practice of solidarity.
The following proposition, offered by Mme. Dr. Edwards Pilliet, was also adopted by the congress: That in the three grades of instruction and in all societies for social education efforts be made to give a legitimate place to the educative action of woman.

The three following propositions were also indorsed by the congress: That the officers of public instruction of the three grades lend their aid more and more to the work of popular universities; that the funds necessary to institutions created by private initiative in aid of social
education outside of the schools be insoribed in the local budgets or, in default of resources in these local budgets, in the national budget; that the public authorities insure the legal limitation and gradual reduction of the hours of labor, in order to secure to laborers the necessary leisure for their intellectual, moral, and social improvement,

None of the papers or reports submitted to this congress have come into my possession, and the above represents substantially all the information relative to this congress that any except its adherents possess.

## The International Institute of Sociology.

I will pass now to the consideration, as my final task, of the only exclusively sociological congress that met in Paris during the Exposi-tion-i. e., the only one of a high scientific character devoted to what may properly be called original research in sociology, wholly disconnected from any propagandist or pedagogic objects, viz: The International Institute of Sociology.

## ITS MISTORY.

Although not one of the regular congresses of the Exposition, the meeting of the International Institute of Sociology in Paris during the progress of the Exposition rendered it practically such, and it was generally so regarded by the world at large. It met in rooms of the Sorbonne from the 25th to the 29th of September, and placards were posted at the entrance and through the halls, "Congrès de Sociologie," precisely as in the case of other congresses. It is not one of the older associations-like, for example, the International Geological Congress, which was in fact for 1900 one of the regular Exposition congresses and met in the Palais des Congrès-but is a comparatively young institution, having been founded in 1893, and being a normal product of the modern awakening to the necessity for a more thorough and scientific study of the phenomena of society. As very little is known of it outside of its membership and a few special sociological students, a brief sketch of its history and operations not only will be appropriate but seems to be demanded here. I can not better begin such a sketch than by quoting the words of M. René Worms, who has been at once its secretary and its inspiration from the first, and whech form the introduction to the first volume of its "Annales:"

No one any longer fails to understand the supreme importance of social stridies, but they are understood in very different ways. Without wishing to blame or to ignore what others are doing, a certain number of men who have for a long time been devoting themselves to these studies have come to agree on certain very simple rules of method that they consider necessary to apply to them. These rules may be reduced to this form:

1. To regard all orders of social facts as intimately connected with one another, without omitting any of them in the process of investigation.
2. In the study of each one of them, to proceed by the objective method rather
than by the subjective method; to observe, classify, induce ${ }^{1}$ (induire), instead of inventing and constructing.
3. Then to strive to understand the world such as it is, which alone will enable us to say what it ought or is to be; to make a science before pretending to make reforms; to know in order to act, but to know before acting.

Such are the essential views which should, according to these thinking men, govern the work in sociology. Having associated themselves since the end of 1892 for the publication of a Revue Internationale de Sociologie, which has appeared since January, 1893, following the initiative of the director of that review, they concluded that they ought in addition to form a scientific association whose work should carry this conception into operation. It was their idea that this association, being open only to experienced investigators, should become the authorized guardian of the principles above laid down and the regulative center of the young sociological science. It was thus that was founded in July, 1893, the International Institute of Sociology.
One year after its birth the Institute held at Paris in October, 1894, the first of its annual congresses.

## ITS CONSTITUTION.

The following statutes of the Institute will render still more clear its nature and purpose:

Article 1. The International Institute of Sociology has for its object to group the sociologists of the various countries for the common study of sociological questions.

Art. 2. It shall consist, at the most, of one hundred members and two hundred associates.
Art. 3. It shall meet periodically in congress. Each congress shall fix the place and date of the next.
Arf. 4. The congress shall hear and discuss the communications of members and associates of the Institute on sociological questions brought before it. It shall elect the members and associates of the Institute. It shall choose the officers who are to serve until the next congress. Members and associates may take part in the congresses and speak in the scientific discussions. Members only may take part in or vote at the elections.

Art. 5. The governing board of the Institute shall consist of a president, four vicepresidents, and a general secretary. Its members shall be chosen as far as possible from different nations. They shall serve one year, except the general secretary, who shall serve ten years. In the intervals between the congresses the board shall have power to choose members and associates. All correspondence relating to the Institute should be with the general secretary.
Art. 6. The Institute shall publish annually a collection of memoirs, containing the communications made to the congress and the discussions to which they have given rise. There may be inserted, with the approval of the board, papers on sociology emanating from members and associates of the Institute which have not been communicated to the congress. The collection shall be offered for sale at a price fixed by agreement between the board and the publishers. Each member or associate shall receive gratuitously one copy of the volume in which he has inserted a memoir.

[^63]Art. 8. Any speaker may express himself in his own language. The memoirs designed for the Annales shall be furnished to the board by their authors in the French language.

Art. 9. No reproduction or translation of the papers that have appeared in the Annales shall be made except with the common consent of the board of officers of the Institute, of the author, and of the publishers. Each author shall, however, have the right to publish a translation of his memoir in a periodical other than French, with the words: From the Annals of the International Institute of Sociology.

Art. 10. To defray the expenses of the Institute the members of the Institute shall pay an entrance fee of 20 francs, and the associates an entrance fee of 10 francs.

Art. 11. Any proposal for amendment to the statutes shall be brought to the knowledge of the members at least six months before it is voted upon. It may be adopted by a vote either of a majority of the members of the Institute or of threefourths of the members voting.

## its meetings (congresses).

The first meeting or congress of the Institute was held in Paris on the 1st to 4 th of October, 1894. Sir John Lubbock (now Lord Avebury) was its first president and attended the congress. His opening address was to some extent a defense of the movement, which did not, as is well known, find universal favor, especially in England. Some of the leading men, however, who could not see their way clear at that time to identify themselves with it, have since become members of the Institute.

After quoting a statement by M. Fustel de Coulanges, that he regarded the terms sociology and history as synonymous, Sir John proceeded to remark:

However, I can scarcely think that these two words can be employed as synonyms. In some respects history means more than sociology. The accidents, the successions, the dynasties, can scarcely enter into sociology, while the discussion of questions relating to education, health, the condition of the poor, and many other circumstances contributing in great measure to the prosperity and welfare of mankind, have not, so to speak, formed any part of history, at least thus far.

There are, then, parts of history that do not enter into the domain of sociology, and questions in sociology not entering into that of history. How sad it is that his. torians have so neglected the social side of history. We find pages, and even chapters, devoted to wars, battles, struggles for power, while the social condition of the people is wholly omitted or treated in a phrase or two.

It is said that "happy is the people who have no history." There can not be a people without a history. It may be that their history consists of the quiet and silent growth of the people; but that is none the less a history, and it is for that very reason more instructive and more interesting.

He then proceeded to give his ideas of the advantages of international associations, which he reduced to the three following:

1. The fact of uniting the representatives of different nations is an advantage. It establishes friendships which contribute and will contribute still more by degrees to avoid those errors and those misunderstandings which, between nations as between individuals, are the beginning of grave disputes.
2. They bring together men who are devoted to similar studies, and give them an opportunity to compare their views and to have friendly discussions, although criticizing one another.
3. They permit every nation to profit by the experience of all the others.

After adducing quite a series of cogent reasons for approving the steps taken, he concluded his address with the following words:

For all these reasons I think that we are making a wise decision in founding this institute, and, if it succeeds, as I believe and hope it will do, we shall have taken to-day one more step in the march of civilization.

This congress met in the Ancien Couvent des Cordeliers, 15 , rue de I'Ecole de Médecine, abore the Musée Dupuytren, which is the meeting place of the Société d'Anthropologie de Paris, which placed its hall at the disposition of the Institutc. The vice-presidents for that year were: Emrico Ferri, Jacques Novicow, Albert Schaeffie, and Gabriel Tarde. The general secretary, M. René Worms, followed the president in a short address on the organization and objects of the Institute, and papors were read by M. Maxime Kovalevsky, "L'étude du préhistorique en Russie;" Paul de Lilienfeld, "La méthode d'induction, ou méthode organique appliquée à l'étude des phénomènes sociaux;" Sin Douglas Galton, "First results of an inquiry into the physical and mental deviations of children in the public schools;" Louis Gumplowicz, "Un programme de sociologic;" Giuseppe Fiamingo. "I question des sans travail et ses solutions;" G. Combes de Lestrade, "La sociologie et la division du sol;" Emrico Ferri, "Sociologie et socialisme;" René Worms, "La science et l'art en matière sociale;" Jacques Novicow, "La justice et le Darwinisme;" G. Tarde, "La sociologie élémentaire;" Ferdinand Tönnies, "Considérations sur Thistoire moderne;" Casimir de Krauz, "La psychiatrie et la seience des idées;" Pedro Dorado, "La sociologie et le droit pénal;" Adolfo Posuda, "La sociologie et l'anarchisme;" Emile Worms, "Liavenir économique des sociétés;" Jules Mandello, "Importance sociologique des agglomérations;" Nicolas Abrikossof, "L'adapéation des individus au milieu social;" and Georg Simmel, "Infuence du nombre des unités sociales sur les caractères des sociétés."

These papers and the names of their authors sufficiently attest both the serious scientific character of the work commenced and the thoroughly international complexion of the membership of the Institute.

The second congress was held at the same place a year later, viz, from September 30 to October 3, 1895. Dr. Albert Schacfle, of Stuttgart and Tübingen, had been chosen president, but owing to adranced age and feeble health he was unable to attend and M. Kovalersky was requested to preside. It was equally enthusiastic and successful with the first; and the second volume of the Annales, containing the papers presented, is somewhat larger than the first.

No congress was held in 1890, but the papers that would have been
presented had the congress met were sent in and published in the third volume of the Annales, which forms a not less solid and important volume than the tro that preceded it.

The third congress was held in 1897, from the 21st to the 24 th of July, this time in a hall in the Sorbonne that had been generously assigned to it by the authorities of that institution. Its president was M. Paul de Lilienfeld, senator of the Russian Empire and a well-known sociological writer. The leading topic for discussion at this congress was that of the organic nature of society, a doctrine which has for its defenders many of the leading sociologists of the world, including the president and general secretary of that congress and M. Jacques Novicow, all of whon contributed to the discussion. It was not, however, a wholly one-sided affair, and the more extreme views were severely criticised by M. Tarde and other members, All the papers and discussions are printed in full in the fourth volume of the Annales:

CONGRESS OF 1900.
The Institute held no other congress until the year 1900, but a volune of the Annales for each of the years 1898 and 1899 appeared well stored with valuable matter. The board of managers of the Institute, with the exception of the general secretary, was changed each year. The following is a list of the successive presidents: 1894, Sir John Lubbock (Lord Avebury), England; 18935, Albert Schaeffle, Germany; 1896, Alfred Fouillée, France; 1897, Paul de Lilienfeld, Russia; 1898, Gumersindo de Azcárate, Spain; 1899, Achille Loria, Italy; 1900, Guillaume de Greef, Belgium.

Dr. De Greer was unfortunately ill at the time of the meeting, and unable to attend. M. Jacques Novicow, of Odessa, one of the first vice-presidents of the Institute, was chosen to preside in his absence.

The congress of 1900 , meeting as it did, in Paris and in the Sorbonne during the progress of the Exposition when the Erench metropolis was thronged with all classes of people from every country in the world, would naturally prove a success, and as a matter of fact it was a very important gathering. It was well attended and the papers presented were of a high order. The programme embraced five principal topics: (1) the clan; (2) the artificial family; (3) social mechanics; (4) historical materialism; (5) industrial associations and the peaceful solution of strikes.

- While there were usually several speakers on each subject, the principal paper on the clan was by M. Maxime Kovalevsky, the eminent Russian anthropologist; that on the artifcial family was by M. Raoul Guérin de la Grasserie; that on social mechanics was by Mr. Lester F. Ward; that on historical materialism was by Baron Casimir de Kelles-Krauz; and that on industrial associations and strikes was by M. Albert Jaffé of Hamburg. This relates only to those who
were actually present and read their papers, but a very important contribution to the subject of historical materialism by Dr. De Greef had been sent in and was read in full. The learned professor informed me later, when I called on him in Brussels after the congress was over, that the effort to prepare this paper, made in the midst of arduous professional duties at the close of the year at the Université Nouvelle de Bruxelles, of which he is rector, was the cause of his break-down, and that as soon as it was completed he was compelled to go to the seaside to recover his health.

To political economists and sociologists, especially in these days, no explanation is needed of the term "historical materialism," but in purely educational circles it may not be familiar. Indeed, this formula is somewhat new, much more modern than the subject itself, which is more or less familiar to all who read, either by some other name, or as a principle or question not yet crystallized into a single phrase. To some it is better known as economic materialism, or as economic determinism. It is essentially the doctrine that civilization rests on a material basis, and that the spiritual side is the natural outgrowth of the material side of social life, a function of it, as it were. It is the doctrine that puts economic considerations first, as the condition and sine qua non of all progress and social welfare. The word "materialism" in this connection is perhaps unfortunate merely on account of a certain stigma that has become attached to that word, though in quite another connection, for no one denies that economics deals chiefly with material facts. In its crudest form the conception is embodied in Moleschott's calembour: "Man ist was man isst," but latterly it has undergone a process of refinement and moral sublimation at the hands of Karl Marx, Friedrich Engels, and Achille Loria, until it has come out as the symbol of all social reform and the hope of the producing masses. This is not, of course, the place to discuss it, but it is important to draw attention to the sociological significance of the introduction of such a question into the deliberations of such a strictly scientific body as the International Institute of Sociology, and it is also a pleasure to testify to the entirely objective and sciencinc treatment that it received. All the papers and discussions on this subject, which took more than two days oí the congress, will appear in Vol. VII of the Annales of the Institute.

## SOCIOLOGICAL METIODOLOGY.

The subjects of the clan and the artincial family called out less discussion, perhaps because it was felt that they were more in the line of anthropology than of sociology proper; that of industrial association and the prevention of strikes, though treated from the strictly sociological standpoint, was seen to belong quite as much to politics in the broad sense, or political science, and also to involve economic ques-
tions. The leading paper on social mechanics, however, was recognized as coming strictly within the purview of theoretical sociology, and that from the side of methodology, and its presentation and discussion consumed an entire day. M. Winiarsky, whose report on this subject to the International Congress on the "Teaching of the social sciences" was given in full in its place (see supra, pp. 1496-1500), though not yet a member of the Institute (he was elected an associate at the close of the congress), had sent in a letter of some length which was read, and his advanced views on the application of mathematics to sociology were discussed.

So far as the use of mathematics is concerned, it must be done with great caution and only in the most general way. The appetitive faculties of man constitute true natural forces, and in so far as their operation can be accurately known they are as susceptible to mathematical treatment as any other natural forces. That "hunger and love," of which Winiarsky has so much to say, constitute the great mainsprings of social as of individual action has not only been clear to all the economists from Malthus and Ricardo to Mill and Jevons, but has been perceived and stated by earlier philosophers like Kant and poets like Schiller, especially by the latter in the celebrated lines of his Lyrisch-didaktische Gedichte, written in 1795:

> Doch weil, was ein Professor spricht
> Nicht gleich zu allen dringet, So übt Natur die Mutter-Pflicht Und sorgt, dass nie die Keite bricht, Und dass der Reif nie springet. Einstweilen, bis den Bau der Welt
> Philosophie zusammenhält, Erhält sie das Getriebe Durch Hunger und durch Liebe.

It is the recognition of this truth that alone can make sociology a science. The difficulty does not lie here, but in the little that is known of the workings of the complex psychic forces. It must be admitted that even these alfective or appetitive forces are far more subtle and recondite than any of the physical forces with which the other sciences deal, so that if all we had to study was what 1 have called the "dynamic agent" of society, that part of the individual and social mind in which the social forces reside-the mere propelling power of the world-we should still have a very dificult problem. The great danger is that it will be forgotten that this is not the whole of that problem. This has been, in fact, forgotten by the ceonomists, not only of the mathematical, but of the purely physical school. They created the "economic man," possessing nothing but physical appetites that they could calculate as the law of gravitation can be calculated, and the consequence was that the economic science founded upon such a man has been found to correspond with nothing real in
society, and that nearly all the "economic laws" deduced from this principle have not only proved to be false, but have, as I have shown, ${ }^{1}$ turned out to be for the most part the reverse of the real state of things.

This has been almost wholly due to the neglect of the other correlative and equally important factor which, in contradistinction to the dynamic agent, I denominate the "directive agent," which exists in all grades of humanity but increases in inftuence with the intellectual derelopment of the race, until in all industrial peoples, and especially in our modern highly civilized societies, it so immensely complicates all these simple economic calculations as to seem almost to render hopeless all efiorts to establish an exact science of social phenomena. Some, indeed, are ready to abandon the task.

While I recognize the extraodinary difficulty in the way of the scientine sociologist and deny the possibility at the present stage of applying mathematics to sociological problems as a rule, I do not admit that even the most complex spiritual considerations create a qualitative distinction between sociology and other sciences, but only that they are calculated to make the stadents of this young science modest and circumspect in all attempts to use exact methods. In the hands of masters like Cournot, Gossen, Jerons, and Walras, even mathematics is a safe instrument of economic and sociological research. The danger is that lesser minds, fascinated by the charms of such exad processes, may carry them to excess and bring all our labors into dispepute.

It would be impossible, eren if it rere desirable, to introduce into this sketch the important papers that were laid before the congress of sociology relating to the clan, the artificial family, historical materialism, and industrial associations, for the reason that they are not obtainable, being in the hands of the editor of the Annales of the Institute, in which they will duly appear. My own communication I have concluded to use here, both as an example of pure sociology as brought out in connection with the Paris Exposition and also as relating strictly to the methodology of that science, and therefore in a very proper sense pedagogic and educational.

I think I can say without undue egotism that the considerations put forth in this paper, by whomsoever they may be presented, are those that lie at the very foundation of the science of sociology and constitute the justification of the claim to the existence of such a science. I had the necessity for some such a presentation so forcibly thrust upon me by the character of sociological literature in general that I felt impelled to formulate once for all the basic principles of the science and to make the effort to attend the only international congress of sociologists in the world and endearor to impress these principles upon the minds of the members of that great representative body of sociological thinkers.

The appreciative reception with which the communication met emboldens me to make the further efiort to lay it before other classes of thinkers and in my own language. Such is my apology, if any were meeded, for concluding this report with this paper.

Social Mechanics.
Read before the Fourth Congress of the Institut International de Sociologic at Paris, Soptember 25, 1900, by Lester F. Ward. ${ }^{1}$

## INTROINCTORY.

Many thinkers deny that there can be a social mechanics. They maintain in varying degrees that the phenomena of society are so complex and irregular that they can not be subjected to exact methods of investigation. Some very logically claim that this excludes them from the domain of science altogether, and hold that there is no such science as sociology. Others recognize such a science, but say that it is not of the same class as other sciences, but is only a moral science, contingent and conditioned, in which the truth attained does not possess real or apodictic certainty, but only moral certainty, or probability.
I do not propose to discuss this point, but shall postulate the true scientific character of sociology, and proceed at once to set forth the grounds on which I consider the claim to rest. I will only say at the outset that if social phenomena are in fact not uniform and invariable, the same as in other sciences, and if social laws are not exact, as in the physical world, then there is no true science of society. I will also say that if I regarded social phenomena as wholly lacking in the quality of exactness, and all sociological truth as necessarily conditioned and only prohable, I should have no interest in sociology, and should devote no time or energy to it.

But it is said that anyone must certainly see a difference between the phenomena of society-historical events, political affairs, religious movements, moral reforms, and industrial transformations-and the action of physical bodies, as in astronomy, physics, and chemistry. I do not deny that from a superficial standpoint there does appear to be such a difference, but it is scarcely greater than that which we find between certain of the sciences that are recognized by all as such, even some of the purely physical sciences, as, for example, between astronomy and meteorology. Here it is clear that the difference lies wholly in the degree of knowledge possessed of the causes of the phenomena, and no one questions that the most capricious atmospheric phenomena are the effects of unvarying physical causes, but which are concealed from direct observation.

It is only a step from this admission to the recognition of the same truth in human events. Nearly all true philosophers have taken this step, and what is callien the philosophy of history is neither more nor less than such a recognition. It is said that while it is impossible to see this orderly causation in individual actions it can be seen in those continued collective actions which make up the history of the world. That it is also true of individual actions, though concealed from view, is virtually implied in this, and some great thinkers have distinctly so stated. No one has expressed this more clearly than Kant, ${ }^{2}$ who is never classed as a determinist.
Before proceeding further let me lay down the principle upon which the scientific character of sociology and all the other complex sciences rests. It is that in the complex sciences the quality of exactness is only perceptitle in their higher generaliactions.
It is well known that as we rise in the hierarchy the sciences diminish in generality as they increase in complexity. By generality is meant the relative number of phenomena that take place under any one law, and simplicity is virtually the

[^64]same thing, viz, the occurrence of many phenomena as the result of a single force or cause. Any field of phenomena, as that of astronomy, in which this is true, becomes the subject of a highly exact science. As we rise in the scale a larger number of principles come into action and the number of phenomena, relatively to those of the whole field that are controlled by a single principle, diminishes. In other words, as the number of principles increases their range or scope diminishes. The causational quality of the phenomena is not affected, but the difficulty of perceiving and understanding it is increased. A point is at length reached at which it is impossible to recognize the direct action of any one single principle. It then becomes necessary to group the principles or laws into classes and deal with these classes as units. The action of such groups or classes of principles can be seen to be uniform and an exact science can be based on such collective action. The most complex of all fields of phenomena, viz, that of human society, can be made an exact science by this method and by no other. A few illustrations will make this clear.
In any complex field of phenomena the ability to see the action of law is diminished or wholly annulled by the multiplicity, obtrusiveness, and proximity of the objects occupying the field. These arrest attention and defy classification. One can not see a city when in it on account of the buildings, or a forest on account of the trees. All attempts to reason about things under such circumstances are vitiated by what I call "the fallacy of the near." All observations are attended with what may be denominated the Brobdingnagian perspective. To overcome this the first prerequisite is distance. The greater the distance, provided the objects can be clearly seen, the greater the degree of order that they will present. This order is simply the visual manifestation of the uniform laws under which they have been produced.

In climbing a rugged mountain covered with forests one gains no idea of shape or symmetry. Lost amid deep ravines, rocks, crags, and heavy timber, all seems chaos. The same mountain viewed from a distance may present a symmetrical cone as smooth as a sugar loaf.

The earth's surface as we journey across it seems very uneven, the maximum irregularity exceeding 10 miles in vertical measurement. The surface of the moon is probably much more irregular than that of the earth, yet it presents a perfect circle to our view. So it is with the limb of the sun, notwithstanding the enormous heights to which the flames of incandescent gases are known to project themselves from its surace.

Distance is said to "lend enchantment," but this enchantment is wholly due to the sense of order which it arouses in objects which seem shapeless when we are near them. Nearly the same effect is produced by reversing a field glass, while a somewhat difierent effect, but of the same class, is obtained by a bird's-eye view.

The result of generalization is also illustrated by physical geography. Nothing seems more irregular than the coast lines of continents or the trend of mountain chains, but a study of the orogenic and epeirogenic movements of the earth's crust brings order out of this chaos and presents to the eye of reason a definite system of mountain chains and continental areas. The physiography of any region also yields to this class of speculation, and comes forth with a symmetry and beauty that are fascinating in a high degree.

Passing over many great fields, which, if examined, would be found to furnish equally good examples, we may first approach the homan plane by a glance at the lessons of ethnography. There is no more seductive study than that of the similarity presented by the customs and arts of uncivilized races in widely separated regions of the globe. The phenomena called "ethnographic parallels," by Dr. Edward B. Tylor, while doubtless sometimes pointing to a common origin and natural derivation, are now for the most part explained as the result of uniform causes pervading the whole field of human activity. No better illustration could be adduced of the eresence of law in the psychic, anthropic, and social worlds.

Many interesting examples are furnished among civilized races by the movement of population. Only one of the least observed of these will be cited, viz, that which is dependent upon the physical fact called by geologists "the fall line of rivers." The law is that the chief seaboard cities of any country settled by migration will be determined by this fact, and will be situated at or near the head of navigation of the principal streams. A striking example of this is presented by the eastern United States, where all the large and many of the minor towns are located at the foot of the Piedmont plateau and on the landward margin of the coastal plain, at the points where the principal streams intersect this line.

Advancing one step farther in the direction of the recognized domain of sociology proper, we may consider the conclusions reached by statistics. The eminent Belgian statistician, Quêtelet, although a poor reasoner, saw the workings of law in human affairs so clearly that he named one of his principal works Social Physics, probably unaware that Comte had already used this expression for the entire domain which he afterwards baptized "sociology," taking great pains to point out their perfectsynonymy. In the whole field of vital statistics, including chiefly the facts of marriages, births, and deaths, Quêtelet found that it was only necessary to collect a sufficiently large number of such facts in order to deduce from them exact and uniform laws, and he tells us just how often it will happen not only that a man of eighty will marry a girl of sixteen, but also how often a man of twenty will marry a woman of sixty.

Statistics of suicide and other crimes have been extensively studied since Quêtelet's time, and although a great number of special conditions modify the result, it is only necessary to make the investigation broad enough in order to arrive at laws that are exact and uniform.

From this the passage is easy to the multitudinous social phenomena which make up what is called the daily news. Most unphilosophical people pore with rapt interest over the columns of the daily press, noting as unique and remarkable all the accounts of crimes, fires, railroad and other accidents, and the innumerable social events that are continually taking place. But the philosophic mind sees in all this nothing but the regular and ordinary course of things, and nothing in any proper sense exceptional or extraordinary. The particular names, places, and details are of course utterly heterogeneous, and incapable of prediction except by those fally acquainted with each particular case, but the general result is something well known, since it is constantly going on, and there is no essential difference between one year and another or between one country and another. If there is a difference in time and place, even that difference is due to special causes which can be discovered with sufficient research.
Thus we might go on to multiply illustrations of the reign of law in the most complex nelds of social activity, all going to prove that the science that treats of that field is an exact science if we only confine it to the most general aspects. It can only descend more and more into the details as the data for such less general conclusions slowly accumulate and are arranged and coordinated for the purpose. While, for example, it is impossible to say what a particular individual will do under a giren set of circumstances, because this would require a knowledge of his entire character as the result of his education, experience, and hereditary predispositions, it is possible to say what general course all mankind may be depended upon to pursue under certain general conditions. From this knowledge of "human nature," i. e., of the social forces as natural forces, the law of parsimony, or of greatest gain for least effort, has long been recognized, and it is about as exact, i. e., reliable, as any law of physics. This is merely saying that there is not much more chance of the existence of unknown perturbing influences that will overcome this law than of unknown bodies in space that will cause perturbations in the movements of the heavenly bodies.

In all attempts to find the beginnings of sociology, and to point out who have been its true precursors, there has been complete harmony in recognizing the primary principle of law in human events. Those who have in any degree perceived this
have been placed on the list of early sociologists. Passages to this effect are culled from the writings of Plato, Aristotle, Lucretius, Tertullian, Machiavelli, Bruno, Bacon, Hobbes, Descartes, Bossuet, Locke, Leibnitz, Fontenelle, Vico, Montesquieu, Bufion, Hume, Adam Smith, Ferguson, Kant, Turgot, Condorcet, Saint Simon, Carey, Bastiat, and John Stuart Mill. This was the first and for ages the only conception which gave to history a scientific character. It is the conception that underlies all the other steps in the process of creating a science of society, and it has now culminated in the more definite formula that such events are true natural phenomena, to be studied by the same methods as other natural phenomena. The idea conveyed by the word "actions" is wholly misleading, since it implies that they might have been other than they were, while the scientific idea is that, given all the circumstances, nothing else could have taken place than precisely what did take place.

All this may be regarded as preliminary to the treatment of social mechanics, but it is a preliminary which, in the present state of our science, seems essential. It is the mechanical basis of the science of sociology, without which there could be no such science. It establishes the existence of a class of true natural forces in society, which places sociology fully in line with the other true sciences. I prefer the name "social mechanics" to the "social physics" of Comte and Quêtelet, because it more clearly expresses the idea of force and law in society, and also because it more readily admits of the fundamental classification which I shall propose.

I have always insisted that this mechanical force which produces the phenomena of society is a psychic force, but I have carefully distinguished it from thought, which is not a force, and which, in so far as it is a cause, is a final cause (causa finalis) and not an efficient cause (causa efficiens). The social force resides in the affective or appetitive department of the mind, and is a true propelling force. It is the canse which makes all sentient beings move and act, a true or efficient cause, producing eifects in the same way that they are produced in the physical world. The social forces are chiefly appetites, and Professor Fouillée has proposed for them the term "appetition," which I am quite willing to accept, but I can not agree with him in classing them as ideas. It is, however, a perfectly legitimate extension of this general conception to regard these appetitive impulses, or springs of action, taken collectively and viewed from a broad general standpoint, as constituting the will, and the term "will" has the advantage of applying equally to the negative class of impulses, which impel away from the undesirable, as to the positive class, which impel toward the desirable.

Having thus found and defined the social forces, we may proceed at once to the fundamental subdivision of social mechanics. This can be none other than the subdivision of mechanics itself as a mathematical science, since there is no essential difference in the mode of operation of natural forces in general, and we have seen that the social forces are true natural forces. As, therefore, the primary subdivision of mechanics is into statics and dynamics, these branches of social mechanics become respectively social statics and social dynamics. They will be treated in this order.
Many sociologists have seen the logical necessity of this classification, but it has never seemed to me that a single one, not even Comte, has clearly perceived or adequately expressed its true meaning and import. There are some who reject it altogether, but such usually also fail to perceive, or at least to admit, that sociology is a domain of natural forces.

SOCLAL STATICS.
In riew of the general confusion on the subject of social statics, I will perhaps be permitted to go somewhat into detail and to set forth with special care the fundamental principle upon which I conceive this branch of the science to rest.

Any true force auting alone causes motion in a straight line. The universe consists
chielly of aggregates which are in the nature of systems, and these have their existing configuration by virtue of the action of many forces which modify one another. The action of each of these forces alone would tend to carry the portions of the aggregate affected by it out of the system into space, and thus to disintegrate and destroy it. The different forces working together tend to preserve it. They do so by partially antagonizing one another and bringing the different parts or elements into a condition of approximate equilibrium.

This holds true for every form of aggregate or system throughout the entire universe, and in every department of nature, in the organic as well as in the inorganic, and in the psychic and social worlds. So far as the maintenance of systems is concerned, every force, considered in and for itself alone, is essentially destructive, i. e., it is centrifugal. This has always been perceived so far as the social forces are concerned, for the affective faculties to which these forces belong include the passions of men, and their destructive and dangerous nature has formed the subject of most ethical teaching. The true reason why they have not been scientifically studied is that they have been regarded as essentially unworthy and bad. Sociology is the only science that can explain their true nature as the propelling forces of society, or, as I have called them collectively, the dynamic agent. And it is true that if there were no way of curbing this social energy it would quickly destroy the social order.

Social statics deals with the process by which social energy is conserved and converted into a useful instead of an injurious agent-that is, rendered constructive.instead of destructive. Social statics might therefore be called "constructive sociology." It deals with the process of social equilibration.

Among the many crude conceptions of social statics is that which identifies the terms "statical" and "stationary," and thus confounds social statics with social stagnation. The distinction will become clear as we proceed, but a single illustration will prepare the way, viz, that the difference is essentially the same as the difference between a mill pond and a stagnant pool.

Although the process involved in social statics is a strictly unconscious and genetic one, still, as our thinking is largely anthropomorphic, we can best understand it if it can be illustrated by human methods. The true effect of every mechanism is to create an equilibrium, more or less complete, of natural forces. Of course the purpose is to use these forces, and all invention proceeds upon the assumption that the quartity of force is not diminished by the mechanism, but is controlled in the interest of man. Devices for constraining and directing force convert it into energy. The force previously exerted in useful ways is made to act in useful ways. The amount of force caused to act in useful ways is greatly increased at the expense of that acting in useless ways. In a word, the previously scattered force is now concentrated, focalized, and directed into advantageous channels. Previously diffused in space, it is now condensed and applied to a given point, as the sun's rays in a burning-glass; or, previously continuous in time, it is now restrained and set free all at once, as in gunpowder.

Perhaps the most typical example, and the one which, by giving the proper latitude to the terms, can be considered as covering every form of mechanism, is the storage battery. The essential principle is the storage of energy for subsequent use, the time, the direction, and the quantity being subjected to the will of the inventor. It is not confined to electricity or combustion, but applies to all forces, and the mill pond, to which reference has been made, is a simple case in point.

We thus see that the action of the human mind is in the direction of creating artificial mechanisms for the utilization of natural forces, and that the quality common to them all is their power to produce a more or less complete equilibrium that can be disturbed at the will of the user and for his benefit. Such mechanisms may be called structures, i. e., they are things constructed. The purpose for which a mechanism is constructed-what it does-is called its "function." We therefore always have
the two facts, structure and function. The advantage of these terms will presently appear.

Sociologists constantly speak of social structures, and this is altogether proper. Social structures may include such as are artificially devised and correspond to the mechanical structures that we have considered, but it is evident that the ordinary use of the term does not contemplate these, and by social structures is usually meant those which are unconscionsly and spontaneously produced. The analogy is generally with organic forms, which are the products of evolution and wholly beyond the inventive genius of man to create or even imitate. Most social structures are in fact of this class. But just as the comparison of mechanisms to structures widens our view of their true nature, so we may profit in the same way by looking upon all structures as in a certain sense mechanisms. We saw that the common quality of all mechanisms was that of equilibrating forces. We may now, if we take the right view of them, perceive that this quality is also common to all structures whatsoever. The full realization of this truth opens up to the view one of the broadest philosophic fields that present themselves to thinking minds. Without a survey of this field and some idea of its nature and scope, the science of social statics can not be clearly comprehended.
The fundamental question is: By what process are natural structures formed? We know how artificial structures or human mechanisms are formed. We have also seen that they have the same leading quality as unconscious or genetic structures. The two are alike not only in both being structures, but also in both performing functions, i. e., they do not exist simply for themselves, but, as it were, for some purpose. If, however, the term "purpose" is applied to both it must be taken in a difierent sense. Its meaning applied to the human mechanism is clearly teleological. Applied to geneic structures, even those of society, it can not be regarded as teleological, since there is no design, and we can only say, in the language of modern science, that the structures are adapted to their functions. The problem is then reduced to that of ascertaining how this adaptation is brought about.

Fully to grasp the subject, it is necessary to start from the broadest possible basis. Not limiting the conception of a structure to social and organic forms, we must expand it to include all systems and all aggregates of whatever kind. We shall then be better able to see the one universal law that controls them all. This law is not the same as the law of evolution, i. e., the unfolding of something previously conceived as rolled up. It may be called adaptation, but this term helps us not in the least to understand the true process.

It is necessary, first of all, to distinguish between a law and a principle. A law is an expression of the order in which phenomena take place. A principle is the manner, mode, or method of their occurrence. It answers the question: How? For example, evolution is a law, but natural selection is a principle. The world has never been fully satisfied with laws. It is only satisfied with principles. Principles alone explain, and the mind is never fully at rest until the phenomena under consideration are explained. Adaptation must also be classed as a law, since, as already remarked, it requires explanation, and the problem before us is neither more nor less than that of discovering the principle that will explain adaptation.

Notwithstanding the modern tendency toward monistic conceptions in all things, we must not be blinded to the fact that in every department of nature there exists opposition. The universe is, as it were, polarized. This shows itself not merely in the form of centripetal and centrifugal forces, but also in that of gravitant and radiant forces-in all the forms expressed by the antithetical terms attraction and repulsion, concentration and dissipation, condensation and dissolution. We need not consider the question whether or not these are merely different modes of manifestation of one universal force. To our powers of observation they are real, if not antagonistic, at least antithetical forces, everywhere operating throughout the universe.

From our present point of view the important fact is that the interaction of these antithetical forces always results in some kind of structure. It has the effect of producing symmetrical bodies.

In the realm of space portions of the primordial nebula are separated out, condensed, and rolled up into spherical or spheroidal forms. If smaller masses fail to aggregate with the larger ones they assume similar forms and are made to revolve about the larger ones as secondary bodies, often with still lesser tertiary bodies revolving about them, the whole forming a system and obeying exact laws.
The particles of which these orbs consist are also suiject to this same law and form molecular systems which are believed to be as symmetrical and exact as the solar systems. Such molecular systems are numerous, and aggregations of them constitute the different substances known to chemistry and mineralogy. Whether these be called elements, inorganic compounds, or organic compounds, they all have the same fundamental constitution.

In the organic world the symmetrical bodies produced by the interaction of antithetical forces are the organized forms, both vegetable and animal, with which the earth is peopled. These, too, are systems wonderfully adapted, and although the bodies are themselves ephemeral, they possess the power of self-renewal, thus rendering the forms permanent.

In the social world the same antithetical forces are in operation with the same result, and social products scarcely differ more from organic products than do these from cosmic products. All the forms produced by the interaction of antithetical forces are structures, and social structures are as definite and symmetrical as organic, chemical, or astronomical structures.

We shall return to this subject, but it is essential to connect the entire train of phenomena considered with the principle primarily laid down that all structures whatsoever, and whether the products of human design or of spontaneous natural forces, have for their essential characteristic the partial equilibration of the forces in action, and that the necessary effect of the conflict of forces and the constraint and alteration of motion is to produce symmetrical forms or systems-i. e., structures. The generic term for the whole process, in whatever department of nature, is organization, and that which has always been going on in the universe and has resulted in the present condition of things is nothing more nor less than a process of organization whereby the previously unrestrained and unproductive forces of nature have been arrested, stored, and appropriated to constructive purposes.
This is the great underlying principle of all organization, and I have long sought for an appropriate term by which to express it. It is primarily collision, deflection, constraint, and transformation of motion, resulting in greater intensive activity at the expense of extensive activity, a shortening of paths with a repetition of circuits, and ultimately the formation or building up of definite circumscribed structures. Although begun in opposition and antagonism, it soon assumes the milder forms of antithesis and interaction, resulting at length in compromise and ultimately in cooperation.

I have alternately used all these terms, but none of them seem fully to describe the principle under consideration. Equilibration and adaptation are the important resultant effects. We are carried back to the well-worn Hegelian trilogy, and plainly see in this process a synthesis of the antinomies at work. After much reflection, I have finally selected as the term that embodies the most complete expression of this all-comprehensive principle the word synergy, in which is contained not only the passive idea of coexistence or mutuality, but also the active idea of work or energy.
Synergy, then, is the principle which explains organization and adaptation in the universe, and these must therefore fall wholly within the province of statics. Whatever relates to structure belongs to statics, and as function is only the utilization of the energy stored by structure, function must also belong to statics. It is remarka-
ble that so many sociologists have fallen into the error of supposing that the distinction between structure and function is the same as that between statics and dynamics, and that while anatomy is statical, physiology is dynamic. ${ }^{1}$
All this is as true of sociology as of biology. The process is the same in all departments of nature, and the same principle, viz, synergy, produces the same results. It is only necessary to recognize the homologues of these products in difierent fields of phenomena. These products of cosmic synergy have already been mentioned in most of the fields of more general Jaw, and we have seen that celestial structures are orbs and solar systems, that chemical structures are atoms, molecules, and substances, and that vital or biotic structures are biophores, cells, and organisms. There are also psychic structures, and if we were to seek for them we should find them in the states, or more properly the acts or phenomena, of consciousness, which are as intelligible products as any of the material products considered. ${ }^{2}$
We are, of course, chiefly concerned with social structures, and must discover what is the exact homologue in society of the cosmic, organic, and assychic structures enumerated. The forces at work in this field are the social forces, and at every point they are polarized in the same way as the physical and vital forces. In biology this duaiism is the interaction of the centripetal forces of heredity and the centrifugal forces of variation, and the result is an adaptation of the organism to the environment. The psychic reverse of this vital obverse is the great dualism of function versus feeling, upon which I have so frequently laid stress. ${ }^{3}$
Function represents heredity and is centripetal, metabolic, conservative. Feeling represents variation and is centrifugal, catabolic, destructive. Adaptation, which is the resultant of the work performed by these antithetic forces-i. e., the effect of psychic synergy, is synthetic, anabolic, constructive. In the animal world this psychic structure, as it may be called, is chiefly instinct. In the lower races of men it becomes that great homogenous plasma out of which are subsequently differentiated religion, law, and social order. ${ }^{4}$

[^65]As the social forces are psychic, all social structures must have a psychic basis. They are all evolved out of this primordial psychic plasma, which seems to me more nearly to constitute the essential germ of religion than of any other human institution. ${ }^{1}$ And in speaking of religion as a human institution, we have employed a highly generic term, which may sorve as a name for all social structures whatsoever, and we may say that the social homologne of the products of cosmic, organic, and psechic synergy is human institutions.
The synergetic products of physical and rital forces are material objects; those of psychic and social forces are chiefly immaterial. They are instincts, habite, aptitudes, customs, and institutions. These are all adaptive, protective, and constructive. They produce, like the others, a partial arrest, restraint, and equilibration of the interacting forces, a transmutation of motion, a conversion of molar into nolecular, and of extensive into intensive activity, and they may be denominated mechanisms or devices for the gathering, focalizing, husbanding, and storing of the psychic and cocial energy.

While in the broadest sense of both terms all social structures may be called institutions and all institutions may be called social structures, there is a narrower sense in which a distinction may be drawn, and the term "institution" may be applied rather to those spontaneous products of the social forces which are more basic and of a more exclusively psychic character, while the term "structure" may be given to the superstructure, as it were, which men more or less consciously erect upon these natural foundations. In many cases the distinction is rague and difficult to draw, while in others it is perfectly clear. Among the most important of these latter may be mentioned religion, as the institution out of which rises the church as a structure; marriage, as an institution upon which rests the family as a structure; government, as an institution to which corresponds the state as a structure. To these might be added matriarchy and the clan, patriarchy and the gens, the blood bond and the tribe, law and courts of justice, punishment and prison systems, education and the school, etc.
Among human institutions which do not so readily admit of this contrast may be mentioned language, literature, art, and science; while to the class of social structures in the restricted sense, but to which the corresponding institutions are vague or wanting, may be referred all the multitudinous voluntary organizations and associations, whether for social, moral, educational, or industrial purposes. In a certain sense, however, the division of labor may be said to be the institution corresponding to such structures.

Any one or all of these examples might be taken up and analyzed from the point of view of the present discussion, and shown to be the product of social synergy as that term has been defined. Our limits compel us to restrict this analysis to a single example. The case that I shall cite is one which a priori mould be perhaps least expected to furnish a good illustration. It is that of the blood bond which binds primitive races into tribes. If the terms are taken with sufficient latitude, however, they represent a most critical stage in the history of mankind. Under matriarchy, or clan life, and to a less degree under patriarchy, or gentile life in its earliest and simplest forms, comparative peace prerailed. The warlike stage of culture followed these, and grew out of the formation of larger groups firmly cemented into tribes, in which, along with an intense tribal attachment, or race instinct, there went a considerable sense of power. The love of race, i. e., instinctive attachment of each individual for all other members of the same group, was always accompanied by a corresponding hatred of the members of other groups, a fact which led to constant wars.

The whole subject, which is far too large for me to outline here, constitutes what

[^66]is known as the "struggle of races," upon which so much has been written and the true significance of which has at last been discovered and made plain by the writings of Ludwig Gumplowicz and Gustav Ratzenhofer. It fits admirably into the broader scheme that I have here unfolded. It is a perfect illustration of the working of social synergy. Every step in the process of the equilibration of these at first wholly antagonistic forces has been clearly traced and the successive resultant social structures named and described. Ratzenhofer shows in a masterly way how the several steps are taren throughout the entire process. The order is as follows, the words in italics marking the steps or stages: (1) subjugation of one race by another; (2) origin of caste, the conquered race forming a lower and the conquering race a higher stratum of society; (3) gradual loosening of this condition, leaving simply a state of inequality, individual, social, and political; (4) gradual rise from purely military dominance to a recognition of law and the origin of the conception of legal right; (5) origin of the stute, under which all classes have both rights and duties; (6) cementing of the whole mass of heterogeneous elements into a more or less homogeneous people; and finally, (7) development of a nation.

In all this we see in the most vivid way the various aspects of equilibration or social synergy, from the primary conflict and antagonism, through the successive stages of resignation, acquiescence, compromise, affiliation, cooperation, and ultmate complete coalescence and unification, such as are manifested by the originally heterogeneous French, German, and British nations. The net result is social organization, and it constitutes a typical case of organization in general. In fact, the process can be much more clearly seen in society than in any of the lower departments of nature, and a clear comprehension of it throws a flood of light upon the obscure processes of organic life of which we can only see the matured results. Thus does sociology often illuminate the simpler sciences.

This example leads us directly to the broader truth that organization is the basis of and in fact constitutes order in the social world, and all the different social structures and human institutions are themselves organized into a whole, which is the social order. The social order is the subject of social statics, and all that has been said comes under that division of social mechanics. Social structures are reservoirs of power applied to social ends. They are the conditions to social efficiency. They are all, as much as the state and the nation, products of a struggle. Darwin has taught us that throughout the organic worid there is a "struggle for existence." Society is also a theater of struggle, but a broader view of the subject in both fields and in all other fields justifies us in modifying Darwin's severe formula, and in looking at the order in the inorganic, the organic, and the social worlds as the product rather of a struggle for structure.

In society the structures that result from this struggle are human institutions, and without indulging too much in metaphor, we may justly say that human institutions are the storage batteries of society that husband the social energy, the products of social synergy, which is the highest expression of the cosmic synergy, or universal struggle for structure.

SOCIAL DYNAMICS.
We have seen that the proper subject of social statics is social order. In sharp contrast with this, the proper subject of social dynamics is social progress, or at least social transformation. The one deals with the status, the other with the movement. We found the social order to be the result of organization, and that this organization consists in the formation, under the principle of social synergy, of social structures, which are further coordinated into one supreme structure, viz, society itself. What, then, constitutes social progress?

Every structure represents a certain type of organization. This is as true of cosmic and organic as of social structures. Under the synergetic principle of equilibra-
tion all organized structures tend toward fixity, and statics deals with an assumed condition of structural fixity. But as the whole process consists of a struggle between centripetal and centrifugal forces, the actual state of nixity is in fact never reached. In biology it was long supposed that organic forms were absolutely fixed, but Lamarek and Darwin showed that this was not the case, and that all forms are in a condition of perpetual change. Although it has not been called by that name, the recognition of this truth really added to the current science of static biology a new science of dynamic biology, and the enormous strides that have been taken in biology since this discovery was made only attest its immense importance and fertility.

Most of the sociology, even down to the present time, relates to social statics. It is occupied with the discovery and description of social structures, even as the old biologists collected and described animals and plants; and many still insist that this is all there is of sociology. Eighteen years ago I made an effort to break with this tradition and emphasize the dyuamic aspect of our science, but it was premature, and had about the same effect as did Lamarck's Philosophie Zoologique, written half a century before the world was ripe for it.

The principal obstacle to the acceptance of the general truth of dynamic sociology is the failure to recognize the science of social mechanics, due to the almost complete chaos and confusion that prevail among sociologists on the subject. If there is no clear conception of what constitutes social statics it can not be expected that there will be any definite idea of social dynamics. I have tried to show what social statics is, and I now propose, as my concluding task, to indicate the true nature of social dynamics.

The fundamental fact is that all structures are consiantly changing, so that social statics is really a theoretical science, though none the less legitimate and necessary on this account. The fact that species are not fixed, but constantly changing, does not prevent our study of plants and animals, considered as ultimate products, and the statical sociologist may at any time take, as it were, an instantaneous photograph of society and study it at his leisure as a naturalist studies a cabinet specimen.

But when we say that social structures are changing we do not mean that the individuals are renewed or that the groups are growing and expanding. Growth and multiplication are simply the functions for which the structures exist, and, as we saw, all considerations of structure and function, sometimes called anatomy and physiology, belong to statics. What has the physiology of animals to do with the great dynamic process of organic development? Nothing whatever. It is precisely the same with social phenomena, and to find the dynamic element we must look further.

To come at once to the point, the change that constitutes dynamic movement is change in the type of structure. Under an ever-changing environment the centrifugal forces are constantly seizing opportunities to break over, be it never so little, the barriers set by the centripetal forces, and wherever this results in advantage, however slight, it is attended with success. In biology this constitutes the principle of natural selection or survival of the fittest, which is the fundamental principle of dynamic biology. My own expression for it is the principle of advantage. Social structures are subject to the same laws as organic structures, and human institutions also constantly changing in type and character to meet the changes in the social environment, which are far more numerous and varied than those of the organic environment.

We might rest the case here and refer all changes in social structures to the principle of advantage, but obviously this would be quite inadequate and unsatisfactory. We must analyze the phenomena much more closely, and find the sociological principle through which they are brought about. There must be some underlying heuristic principle which will explain the modification of social types of structure.

It must be constantly borne in mind that the activities of men are the effects of the social forces as causes. Most of these activities are purely statical. They come under M. Tarde's law of imitation, and are mere repetitions. But there are some, and the frequency of these increases with the increase in human intelligence, that break over this rule, and, to however small an extent, depart from the normal, add some little to what has gone before, and improve upon the old way. This is what M. Tarde calls invention. The term innovation seems preferable, as more generic. All this is littie more than the simple statement of the observed facts. The principle underlying it remains to be sought. It is to be found in the psychology of human action.

We will suppose a given action to be dynamic and not merely static, to be an innovation and not a simple repetition. If we analyze such an action we shall find that it has three distinct effects: 1 , to satisfy desire; 2 , to perform a function; 3 , to modify the environment. Only the first of these effects is consciously sought. The individual as an organism is impelled to action by the motives that are in his nature, and he can only act in obedience to these motives. They are the psychic, and become, when taken collectively, the social forces. The generalized formula to which all such motives can be reduced is the satisfaction of desire, and when this phrase is comprehended with sufficient breadth it is seen to be true that no action ever is or can be performed except for the purpose of satisfying desire. The action is supposed to accomplish this end, but whether it does so or not, it must be intended to do so, otherwise there would be no motive, and we should have an effect without a cause. But whether an action does in fact satisfy the desire for which it was performed has, as we shall soon see, no bearing upon its dynamic character. It may fail entirely in its primary purpose and still be a dynamic action.

The second effect of the action, viz, the performance of function, is primarily a wholly unconscious one. The agent is not normally concerned at all with it. It is the result of ages of cosmic adaptation so complete that the individual has no need to know that his action will produce this effect. Throughout the entire animal lingdom below man it is not probable that the functional effect is ever considered, or that it is known to the agent that a given action, such as eating, will have a functional effect, such as to nourish the body. The sole motive is desire (hunger, etc.). Even in the lowest races of men, as M. Letourneau has pointed out, it is doubtful whether the reproductive act is known to be the cause of reproduction, and in the most civilized communities of the world the cases in which it is performed for that purpose are extremely rare. The functional effect is altogether statical, and merely results in the repetition of cells (nutrition, growth) or of individuals (reproduction, multiplication), and adds nothing in the direction of modifying the type of social structure.

Let us now consider the third effect, which was characterized as modification of the environment. Social progress, as I have so often pointed out, differs from organic evolution in the important particular that, whereas in the latter the environment transforms the organism, in the former man transforms the environment. This third effect is in chronologic sequence the first. The end of the individual is the satisfaction of desire, but except in the very simplest cases this end is not the immediate effect of the action. The end must usually be attained through means. The action is expended directly and immediately upon some means which secures the end. The extent to which this is true depends upon the position of the agent in the scale of organic development. The lowest of all creatures are simply bathed in a nutrient medium which penetrates and nourishes their bodies. A little higher, as in Yorticella, they draw the nutritive particles to themselves by the vortical action of cilia. At still higher stages they seek their food with increasing conscious effort, until, in the highest animals, such as the Carnivora, the pursuit and capture of their prey involves great effort and exertion. But here, as throughout the entire animal
kingdom below man, the effect is to strengthen and adapt the organism by virtue of the Lamarckian principle of increase by use, supplemented by the Darwinian principle of natural selection. The extent to which the environment is modified is comparatively trifling. It is true that through certain instincts some changes are occasionally wrought in the environment. Birds build nests and beavers dams, and some rodents, such as the prairie dog, make subterranean homes that are more or less permanent. On the other hand, the effect is often destructive instead of constructive, as where all the food animals of a predatory species are destroyed, or where all the grass and herbage of a herbivorous species are eaten up. Instincts rarely produce any enduring results. Birds abandon their old nests every year and build new ones even in the same tree. It is clear that we can not say of any animal that its action tends to transform the environment in which it lives to its own permanent advantage.

But with man this is just what occurs. His efforts have very little effect in modifying or perfecting his own physical powers. Up to a certain point in the course of his slow emergence out of the animal state the biologic law doubtless applied to him, and in various ways, unlike those of the other animals, it modified his physical nature, giving him the erect posture, the plantigrade foot, the high facial angle, and the massive brain. But this process gradually diminished until for all the races now known to inhabit the earth it is inappreciable, and for all the developed races it is nil. In fact, a reverse process, at least in part, seems to have set in, and instead of physical advancement there is a tendency toward physical degeneracy.

On the other hand, even the most primitive types of men accomplish something: in the direction of transforming the environment and adapting it to themselves, while everything that is included in the phrase material civilization consists in just this and nothing else. This general truth is vaguely recognized, but it is commonly supposed that it is the result of conscious and intentional action on the part of men. A careful analysis of the conditions shows that such is not the case, but that it is merely incidental and unintended, an unsought and undesired result of the effort to satisfy desire. If desire could always be satisfied without efiort, without causing any modification of the materials which are in contact with man, there would be no human progress. No effort would be put forth for this purpose alone. The environment would remain as little changed as it is by the birds and animals that inhabit the forests and the plains.
The only reason for this difference is human intelligence. Man is the only animal whose mental powers are strong enough to enable him to see that his end, the satisfaction of his desires, can be attained through certain material means, through transformations in his environment. And the higher his intelligence the more of these means he perceives, but the more subtle and recondite the means the more difficult they become. The more remote the end the more laborious thie means, and the employment of such means involves prolonged effort. But the more severe and protracted the effort the larger will be the inciciental results, i. e., the greater will be the transformation wrought in the environment. The individual end is the only thing that is desired, but it is perceived by the reason that the end can only be attained through effort applied to the means.

Now the attainment of the end-the satisfaction of the desire of the individualhas no social importance. It may be set down as wholly statical. So also must be considered statical the indirect functional effect of satisfying desire-sustenance, nutrition, growth, reproduction, multiplication. The only consequence of the action that has any social value is the incidental alteration in the surrounding material conditions that had to be made before the other effects could be secured.

The most obvious form of transformation, and the one that still continues to be the most important, consists in the artificial shaping of raw materials to man's needs. The animal finds a world with such and such objects in it. It knows no other way
than to utilize these objects nearly as they are. Man finds the same world, but he knows how to adapt the objects to his use, and he proceeds to do so in proportion to that knowledge. The result is that in a civilized race nearly everything that is said to have value in the economic sense has been transformed. Let anyone look about him and try to discover a wholly untransformed object of which he ever makes any use and he will find it a dificult matter to do so. Even light, heat, earth, air, and water are more or less modified to man's advantage.
This transformation of raw materials into objects of human use is accomplished by means of two processes-invention and labor. Every perception of the possibility of modifying the environment or any part of it in such a way as to secure the fuller satisfaction of desire is an invention. All the effort put forth in producing this modification is labor. The result, i. e., the actual modification brought about, is production in the economic sense of that term, and all production is of this kind and can be nothing else.

These products of invention and labor, i. e., of art, are therefore merely means to the individual end, which alone is a conscious and purposive effect. The second effect, viz, the functional end, or end of nature, of preserving and continuing life, is unconscious, and is the result of adaptation brought about by natural laws. Both these cffects are statical in the scientific sense. The third effect, viz, that of modifying the environment, also unconscious, unthought of, and undesired, is the dynamic effect, and the only one that has any.social value. Or, to express it in language that is teleological in form but not in fact, the end of the individual is the satisfaction of desire, i. e., human happiness; the end of nature is the preservation of the individual and the race; the end of society is the amelioration of the conditions of existence.

It remains to connect these conclusions with the primary definition of social dynamics, viz, that it deals with the modification of the types of social structures. So far as industrial structures are concerned this is clear enough, but for other structures than industrial it is not so clear. It should apply to all human institutions whatsoever. It does so apply as soon as we give sufficient latitude to the terms employed. Every human institution is constantly undergoing modification, and every increment of modification is the result of the operation of this dynamic principle. We must give to the term invention all the breadth that M. Tarde gives to it. The labor involved in realizing and perpetuating the invention is either a part of the act of invention or else it is simply imitation and repetition in manifolding the objects wrought.

But the objects need not belong to the industrial world. The product need not be a material product at all. The institution may be any of those immaterial social products that were dealt with under social statics. One of these which seems the least tangible, one about which there seemed to be doubt as to whether it should be classed as an institution at all, is language. No more difficult one could be selected by which to illustrate the principle under consideration. If our dynamic principle proves applicable to language it surely can be applied to any other human institution.

In this case the end desired is intercommunication between men. The means employed is speech or gesture or some form of significant action. The change or modification of this immaterial social structure, or primitive human institution, takes place in the direction of improving and perfecting the symbols employed in the conveyance of thought from one individual to another. Every step in this direction is an invention in the proper sense of the term, and the increments gained are preserved by imitation and repetition, which may be characterized as labor or human effort. If we were to trace the whole history of the science of semantics we should find that it consisted entirely in a continuous application of this process from the rudest forms of language to the highest flights of oratory or literary expression.

The only difficulty with this illustration is that language is such a primitive institution that it can not be called exclusively human. It shades off into an animal instinct, and in tracing it backward the dynamic principle here set forth applies in diminishing degrees until it is lost or merges into the principle of natural selection, which is its biological homologue. The same would be found true of many other primitive institutions, such as religion, marriage, and even government. But this does not prevent the principle from coming gradually into full foree with the progress of human society and constituting the basis of social dynamics in all departments. It is that which brings about all modifications in the types of social structures, and introduces new and more efficient structures that gradually succeed the old and obsolescent ones. Changes may of course be retrogressive, and we have in society forms of local and restricted catabolism corresponding to atrophy, reversion, atavism, parasitic degeneracy, and even extinction, in biology. These would form interesting subjects for discussion, and could be shown to come under the sams law as the anabolic transformations, but this would carry me too far.

While the science of social dynamics is thus much broader than the simple question of social progress, still it is the science that deals with social progress, and it is the only science that can adequately explain the nature of progress. It not merely asserts, as did Auguste Comte, that progress depends upon order as its essential basis, but it shows, as he did not, just how this is so. For if progress consists exclusively in the advantageous modification of social structures, it is clear that the existence of such structures is presupposed. But order, as we saw, consists in the formation and coordination of social structures under the principle of social synergy, which is the principle of social statics. Without such structures there is no society, and society consists of social structures. Hence all social progress must grow out of social order, and be, as Comte said, "the development of order." It consists exclusively in the advantageous modifications of social structures, brought about unconsciously and unintentionally by the direct action of man upon his material and spiritual environment in his efforts to satisfy his wants. Both invention and labor come under this head of effort, which is the ultimate principle of social dynamics. We have endeavored to explain this principle rather than to name it. It corresponds to the Lamarckian principle of effort in changing the organic structures employed in securing the ends of the creature, such, for example, as the lengthening of the cervical vertebre of the giraffe by the effort to browse on the boughs that are beyond the reach of other antelopes. In the other characteristic that the result is wholly unsought and even unknown to the individual there is also perfect parallelism in the biological and the sociological principle.
The only essential differences are, (1) that human effort is telic, in perceiving that the means will secure the desired end, and (2) that human effort affects the environment and not the organism. For convenience of distinction, therefore, between the purely automatic and refiex effort of the animal and the rational and teleological effort of man, we may apply to the latter the term conation.

The two great principles of the science of social mechanics are, therefore, social synergy, which controls the phenomena of social statics, and conation, which controls the phenomena of social dynamics.

## CIIAPTER XXIX.

# EDUCATION IN THE PHILIPPINES, CUBA, PORTO RICO, HAWAII, AND SAMOA. 

INTELLECTUAL ATTAINMENTS AND EDUCATION OF THE FILIPINOS.<br>CONTENTS.

Sources of information.
Ethnological, social, and intellectual characteristics of the Filipinos.
Effects of Spanish culture upon the Filipinos.
Literary and scientific activity among the Filipinos.--Native authors.
Early insurrections and conditions preceding the insurrection of 1896.-Free Masorry and the Katipunan Society.-Letters and documents illustrating the propagandism of revolt.-Filipino political writings.

Statistics of cducation.
Higher cducation.-The University of Santo Tomás, the Medical College of San José.
Secondary cducation.-Colleges and private schools, normal and special schools.
Primary cducation.-Condition on arrival of Americans, as shown by reports of army officers; recent laws.

Appendixes.
Bibliography and ancient alphabet.
In the following summary, besides giving the statistics of education proper in the Philippines from official sources, an attempt is made to produce evidence taken from other and foreign sources as to the character and intellectual capabilities of the Filipinos, and the results of the education which has been afforded them in the past. The account of the characteristies of a people by foreigners is always incomplete and unsatisfactory, because the observers are necessarily, if unconsciously, influenced by their own national temperaments, prejudices, and education. Especially is this true of observations made by Europens upon a people so radically different from themselves in race, language, and antecedents as the Filipinos. It has, however, been possible to select testimony which may be regarded as entirely impartial, if equally unsympathetic, the observers having had a merely scientific interest in their work, with no political or religious bias. Their testimony to the natural capabilities of the Filipinos has been supplemented by extracts from the writings of the latter themselves, as an illustration of their ability to share in the intellectual life of the modern world. The observers referred to are a number of German and French scientific men who have visited the Philippines within the last sixty years and have published works upon the geology, natural history, and ethnology of the islands, with observations upon the character and intellectual capacity of the Filipinos. These writers were not mere transient visitors or ordinary travelers or news collectors, but were especially qualified men who were sent to the islands, in some instances, by institutions or by their governments, to prosecute their researches, and they either remained there a long time or made repeated visits, and possessed exceptional facilities for becoming acquainted with the people. Their oninions are therefore of especial value. Besides the writings of these scientific visitors there are a great many Spanish works, both ancient and recent, upon the history and ethnography of the islands which contain a vast amount of valuable information, to which Filipino writers have also made
valuable contributions in recent years. The following summary was prepared from a study of a number of the works alluded to above, a list of which will be given in the appendix.
It appears from the authorities above referred to that the natives of the Philippines may be divided, for practical purposes, into the Christianized or civilized peoples, called "Indios" by the Spaniards, who alone are now designated by the term "Filipinos," and who form the great majority of the population; the wild mountain tribes called "Infieles" (infidels or heathen) by the Spaniards; and the Mohammedans of Mindanao and the Sulu Archipelago, to whom the Spaniards gave the name of "Moros" in memory of their ancient enemies, the Moors of Spain. Ethnologically the Filipinos as well as the wild tribes are divided by a diversity of dialects into a number of separate peoples, who were formerly tribes, but they all have long had a common form of settled municipal life under the Spanish Government. Taking both Filipinos and wild tribes together, there are in all sixty-nine subdivisions of the population with separate or tribal names given in the atlas of the Philippines prepared at the observatory of Manila and published by the United States Coast and Geodetic Survey. Some of the wild tribes consist of only a few persons. The most representative of the Filipinos are the Tagals, the Ilocanos, the Visayas (who are the most numerous), and the Vicols or Bicols, the Tagals being the foremost intellectually and the natural leaders of the islands. The Filipinos number about $6,000,000$. The diminutive blacks, called for that reason "Negritos" (small negroes) by the Spaniards, were probably the earliest inhabitants of the islands, whom the immigrant tribes of Malay stock gradually drove to the mountains. They are now confined to a few localities in the islands, and number about 20,000 . By a second Malay invasion the first comers were in turn gradually driven to the mountains, while the new immigrants settled along the coasts and became the ancestors of the present Filipinos. A third, much later invasion, was a Mohammedan conquest and was interrupted by the arrival of the Spaniards. The islanders had been engaged in traffic with China and Japan for centuries before their discovery by the Spaniards, and many Chinese and Japanese had settled among them and left descendants of mixed blood. To these oriental elements of the population Professor Blumentritt adds Mexicans and Peruvians, who used to serve in the army in the Philippines, and from the intermixture of all these various races the Filipinos are derived. The Spanish element in the population is comparatively insignificant. The wild tribes inhabit the mountainous regions of most of the larger islands of the archipelago. They are usually described as of Malay origin, but the atlas before referred to assigns the wild tribes of a large part of the great island of Mindanao to the Indonesian race. These wild tribes retain the religious beliefs, the customs (including head hunting), and weapons of their ancestors. They live in a state of constant feud among themselves, and their life as described by M. Montano, who traveled through eastern Mindanao in about 1880, is an existence of perpetual terror. Their number is difficult to estimate, but it is supposed that there are nearly $1,000,000$ of them. The same uncertainty exists in regard to the Mohammedan Malays or Moros, whose number is put by Professor Blumentritt at about 500,000.

The Filipinos proper-that is to say, the settled, civilized peoples whose representative men are educated professional and business men, the best of whom are, as will appear, on a par with the corresponding classes elsewhere in the world-are descendants of those dwellers on the coasts of Luzon and the Visayas who were alrearly advanced in civilization when discovered by the Spaniards. Long before that erent they had been carrying on a trade with China and Japan. ${ }^{1}$ Philippine vessels were

[^67]seen in Malacca by the Portuguese on their arrival there in 1511, before the Philippine Islands were discovered by Magellan. Notwithstanding their conversion to Christianity, and even since their modern civilization, the Filipinos have never had a share in their own government, except for two brief periods when the right was granted to them, as it was to the Cubans and Porto Ricans, to send deputies to the Cortes, but the privilege was quickly taken away again. The islands have otherwise always been a military, or rather an ecclesiastical-military, possession of Spain; so that the position of the Filipinos in recent years has come to be a political anomaly, a condition which was keenly felt by the educated and wealthy class.
The history of the subjection of this mixed race-imaginative, emotional, and capable of culture-to European influence begins with their spiritual rather than their military conquest more than three centuries ago by a few Spanish Catholic missionaries, and the dominion of the conquerors, which was for the most part peacefully secured, has been administered since in such a way that the modern successors of those who were at first the devoted intellectual and spiritual benefactors of the converted heathen have become obnoxious to the descendants of the latter. The "Indios" for many generations yielded to superior knowledge and force emanating from a distant, mysterious, and dread source of authority, but eventually, partly through the enlightenment brought by their conquerors, but especially through contact with modern European ideas, their leaders came to know their equitable rights and have demanded the exercise of them by the same methods which have been followed time after time in European history.
The modern social organization of the population is substantially the same as the Spaniards made it three hundred years ago, who wisely forbore to run counter to the national disposition of the "Indios" in subjecting them to Spanish rule, but diplomatically perpetuated their original organization as far as form is concerned. The reorganization was brought about in the following way:

At the time of their discovery by the Spaniards the Filipinos were living in independent communities or villages, except in the region about Manila, in Mindanao, and Sulu, where larger governments or sultanries existed. Each village (called barangay in Tagalog) was governed by its datto, or chief, and his lieutenants, who composed the nobility of the village and formed an hereditary caste. Below them were the common people, the plebeians, and below them again the slaves, who were divided into several classes. The power of the dattos was absolute. The caste system is inherent in the race, and remains to this day, the Spaniards having preserved its form or spirit while they took away the original authority of the chiefs and converted them into dependents of the Spanish Government. The transformation was effected mainly by means of religion. The Filipinos were naturally religious and eagerly accepted the Catholic form of Christianity, which appealed to their temperament and imagination. Their eagerness to be baptized into the new faith made them willing to become the subjects of the King of Spain, a step which they seem to have regarded almost as a consequence of baptism, so that the use of troops after the first military demonstrations was seldom necessary to "subdue" the settled natives, the missionaries being the heralds of the Spanish civilization, while the soldiers were only their auxiliaries. ${ }^{1}$ The practice of the missionaries was to unite several neigh-

[^68]boring barangays, after they had accepted Christianity, into a new municipality or pueblo (the Spanish word for town) in order to break down the individual authority of the dattos and facilitate administration. ${ }^{1}$ But the members of the diferent barangays came together under their own chiefs, forming the wards or barrios of the compound pueblo, and resumed the old name of barangay, although in a few generations the memory of an independent political' organization died out among them and the barangay was made a mere fiscal unit of fifty families.

In order to prevent bostility on the part of the dattos their original dignity was preserved to them by the Spaniards under the mixed Spanish-Filipino title of cabeza de barangay, or barangay chief. ${ }^{2}$ From among these a chief of the entire municipality was elected annually by a board consisting of a certain number of the nobility of the pueblo. This head man of the pueblo received the title of capitín or gobernadorillo (petty governor) from the Spaniards. The election was attended by the local friar (the nomination being subject to his approval), was presided over by the Spanish provincial governor or his representative, and was subject to confirmation by the Spanish governor-general at Manila. ${ }^{3}$ Thus both the spiritual and civil branches of the Spanish Government exercised supervision and control over the municipal government, while in form it was conducted by the native aristocracy. The gobernadorcillo was responsible to the Spanish Government for the general conduct of his pueblo and the taxes, while the ancient hereditary authority of the chiefs of barangay dwindled away and they became mere tax collectors. As the actual governing authority of each chief of barangay was only temporary-during his term
ment was transferred to their vicars. The governor and high court of Manila aided the monks in their work of conversion." (De Morga, Hakluyt Society transiation, p. 321.) A letter from Pope Clement VIII, dated March 25, 1592, addressed to all the spiritual and temporal authorities and all classes of people in the Philippines, contains the following exhortation. "Since," sayshis holiness, addressing the "older Christians" (vetustiores Christianos alloquimur, i. c., those from Spain), "those nations, as you see, are to make their way of life conform to the example of each of you, we ask you to bestow your humanity and kindness upon both the converted and unconvertcd in every possible way, in order to confirm the former in the true religion and invite the latter to it." (P. 321.)

1 M . Montano, the French savant who visited the Philippines in behalf of the French minister of public instruction, found Jesuit priests in northern Mindanao in 1880 freeing the slaves of the wild tribes, "reducing" the latter to Christianity, and settling the converts in new pucblos, exactly as their clerical predecessors uscd to do three hundred years ago.

2 De Morga states that not long after the occupancy of the Spaniards the King of Spain directed by royal order that the honors that had belonged to the chiefs in former times should still be paid to them. The election of chiefs as described by De Morga toward the close of the sixtcenth century remained substantially unchanged in the nineteenth, when the German savant Jagor witnessed one about 1860, except that De Morga (in the English translation) states that the electors consisted of all the married men of the town, whereas in modern times they are confined to the nobility. The gobernadorcillo was the administrator of justice and heard civil suits up to a certain small amount. Appeals lay from him to the Spanish governor of the province. The Spanards did not disturb the old customs of the natives as far as they were not contrary to natural right, such as slavery (which was a "natural right" in 1590), successions, inheritances, adoptions, wills, and lawful contracts. It was lawful to plead native custom in lawsuits, as had been the case in suits before the dattos previous to the arrival of the Spaniards. The jewels and gold which the natives held from their ancesters were exempt from taxation. All this by royal order.
${ }^{3}$ The German savant, Jagor, witnessed an election on the island of Samar in 1860. He says (Reisen in den Philippinen): The election took place in the communal building (tribunal). The representative of the Spanish governor sat at the head of the table as president, with the cura on his right and the clerk, who was also interpreter, on his left. All the cabezas de barangay of the village, the outgoing and the ex-gobernadorcillos then took their seats. Six cabezas and as many ex-gobernadorcillos were first chosen by lot to serve as electors, the outgoing incumbent making the thirteenth. All but the electors then left the room. After the president had read the election law and cautioned the electors to perform their duties conscientiously, the latter adyanced to the table, one after the other, and wrote the names of three candidates upon a ticket. The candidate who has the greatest number of these votes is thereby elected gobernadorcillo for the cnsuing year, unless the cura or some elector objects, the election being subject to confirmation at Manila. The confirmation rarcly fails, because the cura would prevent an unsatisfactory choice. The other officers are elected in the same way. Everything was done with decorum. The proceedings were in the native language, hence the need of an interpreter.
of office as gobernadorcillo-the sentiment of loyalty of each barangay for its hereditary chief became weakened in the course of time, although respect for him as a member of the caste of nobles survived and still remains.
The gobernadorcilio was aided in his functions by varions officers who were elected, like himself, from among the nobility and received Spanish titles like those of similar communal officers in Spain. They had charge of the policing of the municipalify and decided petty actions at law. These functionaries represented the old pre-Spanish village nobility, and in many cases were direct descendants of them. A modern Tagal or Visaya pueblo, with its gobernadorcillo and his lieutenants, and its tribunal or council house, is often likened by Europeans to a French commune, with its maire, juge de paix, and gens d'armes.
The periodical transfer of allegiance by the members of a barangay to another chief than their own, to whose election, however, their own nobility contributed, doubtless had the effect, which the Spaniards could not have anticipated, of familiarizing the natives with a form of elective government and so of preparing the way for the revolutionary organization on a large scale which preceded the insurrcction of 1896 .

As to the natural endowments of the Filipinos, understanding by that term, as has been explained, the setilled, Christianized communities, the following seems to be a fair summary of the testimony of various observers: "The people who inhabit the great island of Luzon," says De Morga, "are of a clever disposition for anything they undertake, sharp and choleric, and resolute. All live by their labor, gains, fishing, and trade, navigating by sea from one island to another." ${ }^{1}$ Modern writers say substantially the same thing. The German and French writers describe them as intellectually quick in many ways. They are excellent imitatore, but without much originality. They are inclined to suljects which impress the imagination and appeal to the emotions rather than to matters which require mathematical reasoning; yet they are good mechanics, and there are civil, mechanical, and mining engineers and draftsmen among the professional men. They are preeminently artistic, and some tribes are noted for their skilled handiwork. Members of the Ilocano tribe leave their own country and travel from place to place as handicraftsmen, and become goldsmiths, artistic jewelers, musicians, sculptors, and wood carvers. Native sculptors and painters are patronized by the church for its many statues and pictures, and their work is praised by travelers, although most of them have only attained mediocrity in the fine arts for want of proper models. The artist Lina, whose paintings attracted attention in Madrid and Paris some years ago, was an Ilocano. His subjects were striking scenes in Roman life, such as gladiatorial contests in the arena, and are said to have been treated with natural power and fidelity to history. The selection and treatment of such subjects by a person so far removed from historical sympathy with them as a Filipino would, in the common mind, be supposed to be, show the susceptibility of the native imagination to European culture. All Filipinos are musical, and there is no pueblo without its band which plays superior music (operatic airs, for example) which was introduced by the Spaniards and is appreciated by the common people.

As to morals and conduct the Filipinos are described as inclined to pleasure and ease, a disposition which, perhaps, has been confirmed by the facility of getting the necessaries of life-rice and fish-and the want of inducement to labor. Nevertheless, they are said by some employers to make good laborers when certain of pay. All appear to be addicted to gambling, as shown particularly in the sport of cock fighting, but not to drunkenness. They are ambitious, possess a high degree of amour propre, and will revenge insults to their pride. ${ }^{2}$

[^69]The common people are described as naturally timid, but nevertheless are capable of heroic deeds under the leadership of their superiors, or when aroused by religious fanaticism. ${ }^{1}$ Isabelo de los Reyes y Florentino, a Filipino (Ilocano) writer, says of his countrymen ${ }^{2}$ that the Ilocanos have been neglected by European writers, owing to the practice of describing all Filipinos as if they were Tagals, and even the latter have been caricatured and described with coarse strokes, as if with a whitewasher's brush. The Ilocanos are small in stature; are ambitious, energetic and enterprising, timid, but capable of heroism, and have furnished brave soldiers. They are polite and not sensual. There are three classes-(1) the principales, or the rich and infuential; (2) the common people of the pueblo; and (3) the country people or peasants. The principales are of a more delicate appearance than the other classes. They are educated, and some have distinguished themselves as students. They are addicted to card playing, and some preserve the ancient despotism which distinguished thei: ancestors. To the lower class belong the painters, musicians, sculptors, and mechanics. They are mostly imitators, and have not had the best of teachers. They built vessels in the last century from drawings made by Europeans. ${ }^{3}$

Probably a large majority of the Filipinos can read and write their own languages, but few of them know Spanish, only those having taken the trouble to learn it who wished to use it in business. Under Spanish rule much of the routine official business of the government was conducted by Filipinos who had learned Spanish. The common people are eager to read anything they can get which is printed in their language, but hitherto they have been starved in this respect, their reading having been confined to sacred subjects, the lives of saints, and poetry, while all knowledge of the intellectual movement of the modern world has been kept from them. Among their intehectual amusements is the theater, and they follow with unflagging interest the plots of interminable plays. ${ }^{4}$ M. Montano, a French savant, describes a play which he witnessed in 1880 at a pueblo of the Bicols on the east coast of Luzon on the occasion of an election of the gobernadorcillo. The inauguration was celebrated by feasting, music, processions, and the play in question, which was written by a native poet in Bicol. The plot, as given by M. Montano, is clearly an imitation of the old European romances which were still in fashion in the sixteenth century. This play lasted several days, and had been more than a month in rehearsing by the young people who took the parts in it. On the opening day everybody was in gala costume, and the neighboring villages had contributed their population. There was a procession with a flat representing a vessel, which was manned by small Bicols in the costumes of sailors, who executed maneuvers while singing. Then came the accessories of the play, carried by workmen concealed in them, such as lions, a fabulous serpent or dragon of pasteboard, whose folds reached back into the procession, and immense whale-like monsters. Next followed a chorus of young girls, each carrying a lantern with a

[^70]letter on it, the whole spelling the words Milagrosa Inago Virginis. Then came bands of music, artillery, and ormamented cars bearing glittering images of the saints. The day wound up with fireworks and illumination of houses. There were triumphal arches and obelisks of bamboo on the line of march. At the play the crowd stood in the open air facing the stage. The theater itself only afforded shelter to the principales of the pueblo, who occupied the boxes. The authorities of the pueblo sat upon the stage itself (as the grands seigneurs of the time of Louis XIII were accustomed to do), which also accommodated the orchestra. The stage fittings were as simple as those which sufficed for Shakespeare, in whose time a sign, hung upon the stage, answered for scenery. Here even the sign was wanting, and it was only by the actors calling out "What a frightful desert," or, "I salute your majesty in fear and trembling," that one knew whether the scene was in a desert or a palace. The play was in part as follows:
During the day performance the princess of Constantinople, aiter many catastrophes, was carried off from her father's court by a shepherd, who was also a powerful magician, and he took her to the most inaccessible parts of the mountains, where she was guarded by the pasteboard lions and dragon which had cut such a prominent figure in the procession. When the play opened in the evening the father of the princess was seen, surrounded by his court, bewailing his loss. He paused, however, long enough to salute the new gobernadorcillo, who entered to take his seat, while the band played the royal Spanish march and the audience applauded. After this interruption the unfortunate monarch sent his courtiers in search of his daughter. Just as they were about to start some Moorish ambassadors arrived, who also offered to join in the search. This offer aroused a commotion, and provocations and challenges were given. The ambassadors and courtiers danced about in a saber fight; the ladies of the court also seized sabers, and the ballet became general. M. Montano remarks that the Filipino drama often introduces Moros, both ladies and paladins, and their dialogue always concludes with this ballet, called "Moros-Moros," from which circumstance plays of this kind take their name. The finale was as follows: The princess had resisted the magician shepherd in spite of his threats, and had subdued the monsters to her will. Now appeared on the scene the valiant Prince of Tuscany, who alone of all the searchers had been able to find the missing princess in the desert, with whom he is desperately in love. The prince, however, has one capital fault which would forever prevent his marriage with the princess. He is a Moro, that is to say, an infidel, while the princess is a fervent Catholic, and feels in duty bound to conceal from him the sentiments with which his splendid appearance and his valor have inspired her. The prince presses his suit and falls upon his knees before the princess, who is half won, but still restrains herself sufficiently to say that perhaps she might have listened to the seductive words of her wooer were it not for his wicked religion, which he must renounce if he expects to receive any kindness from her. At this point, says M. Montano, the audience, completely wrapped in the play, held its breath in order not to lose a syllable of the dialogue, and manifested its enthusiasm by following the words of the actors with low, cadenced whistles. The Bicol author knew that for his audience non-Catholic and enemy are synonymous terms, and hence the intensity of feeling at the wooing of a Christian by an infidel. The play ended by the conversion of the Prince of Tuscany and his marriage to the princess.

While the characters in this play are European, the ideas of princes, embassies, magic, Christian, and infidel, seemed to be familiar or congenial to the native customs and temperament.

Opportunity for higher education has been offered the Filipinos by the University of Santo Tomás at Manila for nearly three hundred years (it was founded as a college in 1611, about twenty-five years before Harvard), and by various colleges and
schools which have been established from time to time in the islands, principally by the friars and Jesuits, beginning at a very early period. ${ }^{1}$

Literary cultivation was always characteristic of Spanish colonial civilization, the clergy, with the urgent cooperation of the Kings of Spain, having always established schools of higher learning in the colonies which were open to the natives, and the kind of education offered in those institutions has produced lawyers, statesmen, literary men, generals, and presidents of the native blood in the various countries of Spanish America. The effect of the education introduced by the Spanish friars and of intercourse with Spaniards themselves, citizens of a Latinized, European, Catholic nation, upon the Filipinos, a people belonging to a different human family, of a radically different linguistic stock, a race, one would say, alien to the core to European ways of thought, has been, nevertheless, to give the latter a considerable tincture of the intellectual cultivation of Europe. This is seen, aside from their writings and professional occupations, in the tastes and manners of the educated. classes, as described by various observers, in minatie of conduct and allusions in conversation, which show the effects of culture. The United States Philippine Commissioners remark that "The educated Filipinos, though constituting a minority, are far more numerous than is generally supposed, and are scattered all over the archipelago ; and the commission desire to bear the strongest testimony to the high range of their intelligence, and not only to their intellectual training, but also to their social refinement, as well as the grace and charm of their personal character. These educated Filipinos, in a word, are the equals of the men one meets in similar vocations-law, medicine, business, etc.-in Europe or America." ${ }^{\prime 2}$

Graduates of the university have naturally betaken themselves to the only careers

[^71]open to them under the political conditions in which they were to live, viz, law, medicine, and the church. Among the lawyers, Professor Semper remarked thirty years ago, were to be found advocates worthy to be compared with the best in Spain. But on account of the antimodern spirit which prevailed at the university up to a recent period and the repression of free intellectual activity in the islands there was neither opportunity nor inducement for ambition to undertake studies in the scientific, social, and political subjects which have been fashionable so long in Europe, but which might have had dangerous consequences in the Philippines. Nevertheless the influence of literary and professional Filipinos who had been educated at Manila and in Europe was very marked in the recent political history of the islands.

All competent observers have remarked that the Filipinos have a natural aptitude for instruction, the children being mentally quick. Many Tagals can speak several languages, and the English used by representative Filipinos in the United States is noticeable for its idiomatic excellence. Their capacity for one branch of elementary culture is shown by the fact that they knew how to read and write, with alphabets of their own, when they were first discovered by Europeans. According to Montano, some of the wild mountain tribes still use alphabets like those which were found among the natives of the coast when the Spaniards arrived, and they have traditions that their ancestors had many writings on leaves at the time of the Malay invasion, which were destroyed when they fled to the mountains. There are several of these alphabets which have been studied by French and Spanish and Filipino writers. De Morga says on this subject (he was speaking of a time prior to 1600) : "The Visayas use letters and characters of their own which resemble those of the Arabs. The usual writing is on the leaves of trees and on canes, upon the bark." "They write very well in all the islands with some characters something like Greek or A rabic, which are in all fifteen; three are vowels, which serve for our five; the consonants are twelve, and they, one and all with points and commas, combine and signify whatever it is wished to write as fully and easily as is done with our Spanish alphabet. There are very few of them who do not write very well and with correctness." ${ }^{1}$ The aptitude of the common people for languages and their ambition as well are shown by their perseverance in learning Spanish, often in spite of dissuasion, and becoming clerks and servants to Spaniards, while Filipino authors write in several languages.

Notwithstanding the ability of the Filipinos to read and write when first discovered, it does not appear that they had any written history or anything that could be called literature. They had poetry, but no evidence is at hand to show that it was written; their science was confined to certain arts, and their philosophy had hardly passed the stage of mythology. Whatever intellectual activity they manifested in the last three hundred years, aside from practical affairs, was mostly confined to poetry and religious writings after patterns set by the clergy, ${ }^{2}$ until within recent years, after intercourse with Europe had broken down the intellectual barriers which hemmed them in, when they have turned to literature and science as well as to the practical application of learning in the professions, and have been familiarizing themselves with the advanced thought of Europe. This has been effected in spite of repression, for even after intercouse with Europe was permitted a close surveillance was exercised over all liberally educated men, who were constantly under suspicion and kept in dread of arrest and deportation, and there was a censorship of the press

[^72]which it was perilous to brave. ${ }^{1}$ When we remember that it was the Spanish policy to keep the Filipinos in a subordinate condition, the fact that they did finally make themselves known in the world of letters and arts is remarkable. So is the persistence of the native language, which is used everywhere in the islands instead of Spanish. Spanish became the universal language of Spanish South America and Mexico, but in the Philippines the natives have retained their own tongues, except when expediency has made Spanish necessary. Another noteworthy fact is the persistence of old pagan beliefs under the cloak of Christianity among the common people, a peculiarity which has often been noted. ${ }^{2}$

Under the conditions which prevailed in the island little intellectual activity could be expected. The Filipinos have nevertheless turned to journalism, science, statistics, history, and novel writing, devoting their talents quite naturally to the amelioration of the condition of their own country. Specimens of political journalism will be given later on. The scientific writings in Spanish-for the Filipinos must learn to write in a foreign language if they want a hearing outside the Philip-pines-comprise works upon the geology and botany of the islands, the statistics of its production, and the like. Filipinos have filled chairs of chemistry, botany, medicine, and pharmacy at the university. The draftsmanship of the atlas of the Philippines, recently published by the United States Coast and Geodetic Survey, was the work of Filipino draftsmen under the direction of P. José Algué, S. J., the director of the observatory. Although the geological and other scientific works are not available for examination, it is easy to judge by their titles what they doubtless are. All such works are pretty much the same everywhere. They are mostly mechanical repetitions of observations and discussions in imitation of models set at the European centers of study. From testimony before the United States Philippine Commission, given by the Jesuit fathers, we infer that the Filipinos take kindly to scientific studies. In ethnology Filipinos have published articles and works upon the history, religion, and customs of the Filipinos, and the early alphabets, besides essays on the modern political situation and Spanish legislation. Pardo Paterno, who was prominent in the insurrection of 1890 , wrote a history of the pre-Spanish civilization of the Filipinos, and another work upon the social influence of Christianity. Of Filipino literary men the best known was the unfortunate Dr. Rizal, whose reputation as a physician and man of science has been eclipsed by his literary renown, and still more by his tragic fate. His writings, and especially his novel, "Noli me 'Fangere," which was first published in Germany (with a motto from Schiller), rendered him obnoxious to the authorities, and he was the most illustrious of the hundreds of victims who were executed at Manila for complicity in the insurrection of $1896 .{ }^{3}$
${ }^{1}$ See the letters from Jacobo Zobel y Zangroniz to his friend Hübner, about 1870, quoted in a notice of his life and works by the latter in the Deutsche Rundschau, 1897. Zobel was born in Manila of Gcrman and Spanish parentage, educated in Spain and Germany, and returned to Manila to take his father's business. He held official positions there. He was an archeologist and a generally cultivated man. He was suspected of liberalism and arrested. After a long imprisonment his exccution was prevented by the earnest intervention of the Gcrman minisier with Castillo, Spanish undersecretary for the colonies, both of whom were friends of Zobel. The previous commands from Madrid had been disregarded in Manila.
${ }^{2}$ Many writers on the Filipinos, German, French, and Spanish, have noticed the persistence of old superstitions in the midst of the superposed Christianity. This, doubtless, is truer of some tribes than of others. Professor Semper relates that some priests complained that the same men would attend mass and then turn to their anitos for help in securing a good harvest. Isabelo de los Reyes, in his work El Folk-lore Filipino, gives a mass of living superstitions and beliefs in demons, witcheraft, etc. Fernandez Lopez, a Spanish writer, in his work on the religions of the ancient Tagals, Madrid, 1894, says of the present religion: "They have professed the Apostolic Catholic religion ever since the arrival of the Spaniards, but in such a singular way that among the lower classes there is a feeble faith under which is conccaled a great deal of paganism, while among the best people there is much superstition and fanaticism." The Abbé Brasseur de Bourbourg mentions a similar instance of the survival of the old religion of Central America which he surprised in a native attendant who was greatly alarmed when he found the Abbe possessed of the sacred mysteries of his faith.
${ }^{3}$ This novel has since been published in the United States, with the title "An Eagle Flight."

A little work by Isabelo de los Reyes y Florentino, an Ilocano, eutitled El FolkJore Filipino (Philippine folklore), is both valuable for its subject-matter and interesting as an illustration of native disposition to enter into the sort of in vestigation recquired in such work. In the introduction to his treatise the author describes the English origin and the scope of the term "folklore" and gives a long list of the subjects which are included in the study, together with a history of its cultivation in Europe and in the Philippines, in which discussion he shows a wide range of reading and a critical faculty. He then describes "folk belief" or worship among the Ilocanos, which is mainly an account of numerous superstitions connected with the affairs of daily life-birth, marriage, and death; of beliefs in various malevolent beings that dwell in trees and floods-Hocano dryads and nereids-and in magic, together with some of the mythology of that people. One chapter is devoted to a comparison of certain superstitions which are common to Ilocanos and Europeans, and in another the author points out mythological beings and certain beliefs which have been introduced into the native folklore from Europe. The work contains a brief account of Filipino poetry, its peculiarities of rhyme and structure, both of which are strange to European ears. The specimens given with Spanish translations in prose are mostly songs or odes composed to celebrate birthlays, or are declarations of love. Many are acrostics, the initial letters forming the name of the person addressed, which may be an imported ingenuity, as some classical allusions to Cupid, Flora, etc., in a Spanish song he gives certainly are. One ballad is also given which tells the deeds of a mythological hero. ${ }^{1}$

The author was aided in preparing his work by other Filipinos, who contributed chapters upon the folklore of their respective provinces. A remark made by one of these writers, Señor Mondragon, who explained the backwardness of the Filipinos by their lack of opportunities and advantages in the past, is noteworthy. He says: "I should insult the intelligence of my readers were I to explain that people in England were at one time Visayas or Pintados [tattooed], or that the Gauls and Germans, and perhaps all Europe, lived in early times like the Aetas, the barbarians of the north of Luzon."

The following illustration of the former political conditions ainong the Filipinos is given by Isabelo de los Reyes, under the guise of a story with the title "Folklore of Filipino political administration." The time of the story is the first quarter of the nineteenth century. Possibly the conditions did not change materially until very recently. It will be seen that the writer is not without a share of cynical humor.

## A STORY OF FILIPINO POLITICS.

Young Isio (Dionisio) had studied at a college in Manila but had been unable to complete his course on account of the death of his father, which event compelled him to return to his native town. His mother dying soon after, left him an orphan, alone in the world, with only a very little property, the remains of his paterual estate, which had been partly wasted by his father in prodigality and partly consumed by his expenses as gobernadorcillo [petty governor] of his native town, which office he had filled some time before his death.
The life of Isio was now a continued series of cruel torments. He had been reared in comparative luxury and now found himself reduced to poverty and compelled to suffer privations to which he had never been accustomed. Nevertheless, he drank with resignation the cup of bitterness which his unkind fate had presented to him.

Beginning the cultivation of rice and indigo on a small seale, at first with his own resources and afterwards in company with others, he soon became convinced that hard work and good credit can work miracles. In fact, at the end of ten years he had

[^73]the happiness of seeing nearly all the property which his father had dissipated restored.

One day while Isio was busy in the field he received a communication from the gobernadorcillo of the township notifying him of his nomination as cabeza de barangay. Instead of giving vent to execrations and driving away with a cudgel the alguacil who brought the notice, as many do on similar occasions, as if the poor wretch were responsible for his message, Isio merely said, "Very well, I will go and sce the gobernadorcillo in regard to the matter," which he soon after did, whereupon the following conversation enslied: "My dear sir," said Isio, "I make no objections to serving the State, because I recognize that the State has the perfect right to demand from all and each of its citizens the performance of any duty, without which neither the State nor society, for which we are created (as shown by our natural weakness and our innate dependence upon others) could exist. I therefore accept with pleaswre the office tendered me, and wish to express my gratitude that you have thought proper to inscribe me among the principales [nobility]. But, for my own tranquility and honor, I must demand as a condition that correct accounts be rendered me of the present condition of the office, that is to say, I wish you to assure me that the persons whose names appear on the lists of taxpayers which are to be turned over to me, really exist, or that it will be possible to collect their taxes here, because I can not consent that my property, aequired with so much labor, should be consumed in making good the taxes of absentees, nor can I go and hunt them up in other provinces. Neither-_"
"My dear sir," interrupted the governor, "are you in your senses? Whether you wish it or not you are obliged to accept the office, and I have just sent out notices that your property can not be alienated, since it has been bonded to the treasury as a security for the fulfilment of your official obligations."
"Put, my dear sir, who could have given my property as security," asked Isio. "Has any one but myself the right to do so?"
"Undoubtedly. Several of the principales and myself have informed ourselves of the amount of your property. We know the lands and the house you own, and the governor of the province [Spanish], in view of this information, for the truth of which we are responsible with our own properties, has confirmed your nomination as cabeza, even without your knowledge."
"I am deeply obliged to you for being willing to be my sureties," replied Isio, "but neither the house in question nor the lands belong to me exclusively, but are partly the property of my partner, Mr. X."
"That makes no difference," replied the governor, "you are cabeza, and there is no he!p for it."
"I accept the office with pleasure," said Isio, "but on condition that I may be allowed to arrange the schedules which I must make good, otherwise I shall refuse to accept either the nomination or the register of polls or the schedules."
"If I thought that your manner of replying was due to a want of respect," said the governor, "I would have you put in jail at once; but fortunately I know your inoffensive character and will make allowance for your ignorance. You business men always think that everything is settled if only the accounts are straight, but you are mistaken. Do not be foolish enough to refuse the office of cabeza or the tax lists and schedules, because your refusal will not free you from the office, and when the time comes for settling its accounts with the Government, whether you have collected the taxes or not, or have accepted the office or not, you will have to make good the amount called for by the schedules just the same as if you had performed your duties. Wherefore, my friend, if you will take my advice I think it would be better for you to take the schedules and attend to them yourself, and then perhaps you will only have to make good a small deficit instead of the whole amount."
"Then give me two days for consideration," said Isio, and he hastened to consult an old ex-gobernadorcillo of his acquaintance, who possessed the wisdom born of experience. To his surprise the ex-offcial showed that he was already aware of his appointment, for he addressed the young man by his title and informed him that he had seen the public notice that his property was hypothecated to the Government as security for the taxes. It was not to be wondered at, he added, that a gobernadorcillo should endeavor to put some of the burden of government upon other shoulders than his own, since many cabezas desert their post and leave the governor to make good their deficits." He urged the young man to have compassion on the present gobernadorcillo and help him by accepting the office of cabeza. "Besides," he added, "if you are not overscrupulous there are many ways of coming out of office without loss." He then pointed these out. They practically amounted to falsifying the schedules in various ways; whereupon the young man declared that he would not dare to follow his counselor's advice. The latter then assured him that in that case his career would probabiy end in prison, while his property would be confiscated and sold at auction, all on account of his excessive scrupulousness, as his father had lost his before him. "But when I was cabeza," he added, triumphantly, "instead of losing my house I acquired a second one out of my office."
"Miraculous!" ejaculated Isio.
"Don't believe in miracles, young man," replied the old gentleman. "The thing was very simple. The people of this province are extremely ignorant and timid, and a man with any brains can live royally at their expense. When I received the lists of the taxpayers I noticed that more than half were missing, some were in distant parts of the country, some were unknown, and others dead."
"Did you request to have the list revised?"
"That would have been a foolish waste of time and money. It would have taken years to obtain particulars about each absentee, and as all the proceedings would have to be recorded on much official paper at my own expense and I should have to pay a clerk besides, the whole would have come to a high figure."
"Then what did you do?"
"I made those who were present pay the taxes of the absentees as well as their own. I knew where the leading men lived and used to visit those living in the country with a little of my authority occasionally-those, that is to say, from whom I could extort with impunity giits of eggs, pigs, chickens, fruits, etc., which, when sold, bring in money. Besides, when I undertook to build a house I made some of the laboring men haul timbers from the woods for me, others cane, and others the rest of the necessary materials, and do other work besides, for which I paid them no money, but only lodging. This proceeding shocked no one, since, as you know, it is a well-established custom. This work of theirs was in lieu of the 'personal labor' on public works required of the common people every year."

Isio was repelled by the advice of his aged counselor and went away in disgust. The old cynic soliloquized as follows, after his departure: "Isio is a very excellent young man. The energetic dignity with which he rejected my advice was gratifying to me, highly so, as it was also to see the respect due to my years humbled before the lectures of this beardless youth. The poor young fellow came to me for good advice and to whom could it have occurred to give him dangerous and hazardous ideas unless to such a worthless old fellow as myself. But how else could I have advised him? I was sorry for the loss of his property, which the good boy has managed to acquire at the cost of so long a struggle. Yet it is true that we have no right to rob our neighbor in order to save our own property. Scruples! Bah! They are the most foolish of all the nonsense of mankind. Well, we shall see whither the strict conscience of this brave boy will lead him. He can not get out of this predicament without the wisdom of Solomon to help him, and what sort of a Solomon does the innocent Isio make!'

The captain's apprehensions were soon realized. The first year Isio had to make good some deficits and was compelled to neglect his own business entirely in order to hunt up absentees at his own expense. The second year he quite agreed with the advice of his old friend, the ex-captain, but he lacked the fortitude necessary to carry it out. He found himself unable to rob the poor. He took to drink in his despair, and intrusted the duties of his office to a subordinate, in consequence of which the deficit was doubled at the close of the year. Fearing imprisonment and the sale of his property if he acquainted the gobernadorcillo with the real state of his affairs, Isio resorted to a money lender who accommodated him with a loan bearing interest at 20 per cent per month, taking as security a mortgage on lis property, not knowing that it was already hypothecated to the Government, a fact of which Isio did not think it necessary to inform him. He now felt confident of acquitting successfully his obligations to the Government, but was equally certain that he could never escape from the clutches of the usurer. In this extremity the idea occurred to him to become a candidate for the office of gobernadorcillo itself, and he repaired again to his former adviser, who urged him by no means to undertake so desperate a step. The office was far more expensive than the one which had already ruined him, and however desirous isio might be of following the advice to make the office pay its way, he lacked the courage and experience necessary to carry it out. It would be better for him to go to jail, allow his property to be sold, and then labor on the public works, than to risk his reputation and property further. That had been the fate of hundreds of cabezas. After arguing for a long time, during which the old man recalled by name the half dozen ex-gobernadorcillos of the town still surviving who had either been in jail or lost their property in consequence of their official misadventures, he alone having escaped all the dangers and pitfalls into which the others had fallen through his foreknowledge of the requirements and real possibilities of the office, he finally consented to canvass among his friends for Isio as a candidate, while another candidate was nominated by other leading men of the town.

As election drew near the political differences increased to such an extent that it seemed hardly possible that the town could escupe without a contest of arms between the two parties. Political passions were aroused and old friends, now divided, no longer greeted each other when they met. On the eve of election many cabezas hastened to the treasury to settle their accounts, because no one in debt to the treasury can vote. Both parties inquired minutely into the private conduct of their adversaries in order to discover some act which might bar their votes.

On the day before election the principales (the voters of both parties) were summoned to the council house by the bell and seated themselves at a long table at the head of which sat the gobernadorcillo, and proceeded to discuss the nominations of subaltern officers. The president presided over the discussion impartially and when it threatened to become too warm on the part of the younger men, the older took part and restored concord.

The Spanish chief of the province presided over the election of the gobernadorcillo. The town then presented an animated spectacle. All the principales, or nobility, with the town band, were present in the council chamber in gala costume, awaiting the Spanish governor. Before proceeding to vote, the governor delivered an address in which he exhorted the voters to forget their quarrels and choose the most worthy candidate. Next the list of voters was read, and then something so unusual occurred that it is worth noting and studying. Those timid people who would never dare to open their lips in the presence of any peninsular Spaniard on ordinary occasions now suddenly discorered an umatural courage, as if magnetized, and with the greatest coolness declared, in the very face of the Spanish governor, that so and so was disqualified from voting because of some statutory reason which they adduced. The ardor with which they accused or defended candidates was singular, and especially so when it came to scrutinizing the candidates for the office of gobernadorcillo.

What was the cause of this energy of accusation? It was simply due to the fact that the people felt the freedom which was granted them and knew that no one would check them in the full exercise of it.

Isio lost the election, much to the chagrin of his patron, who, however, encouraged him by intimating that not all resources had been exhausted and, indeed, managed to so operate through the superior powers who revised the popular vote, viz, the cura, the Spanish chief of the province, and the governor-general at Manila, that Isio was eventually declared elected gobernadorcillo and was inducted into the office with the usual ceremonies of pompous processions marching with music through the decorated streets of the town, speeches, and balls.

A short time only had elapsed before Isio began to find his new office intolerable. He was compelled to travel about perpetually to see the governor of the province and other superior officers on business; he was wearied with his public official church attendance, and he was incurring larger expenses. He wished to resign his office, but his mentor admonished him that if his courage were to fail him to such an extent as to resign he had better hang himself at once since there would be no resource left. Isio accordingly plucked up courage and, in imitation of his preceptor, built a house for himself at the public expense, employing the laborers on roads and bridges for that purpose; reorganized the militia and led them against the bandits and mountaineers, while he managed to extract money in various ways from the public by means of his office, and settle with his creditors. Withal he became domineering and therefore obnoxious to the principales, and one day he received a summons to attend court to answer certain charges which they had preferred against him. Consulting his old friend in this emergency, he recaived the advice to go boldly to the court, deny all the charges, and intimidate his enemies, a course which he proceeded to follow, but with only partial success. A few of his revengeful enemies-inferior officers whom he had exploited-remained firm and persisted in their charges against him, and he knew that if the matter were to come to trial his fate would be sealed. His counselor frankly told him that this time he saw no way of escape, as his enemies were determined, his misdeeds were well known, and the law was inflexible.

At this supreme moment of despair, when utter ruin and disgrace were imminent and even his shifty counselor could see no way of escape, Isio, happening to look toward the mountains where the Igorrotes lived-wild mountaineers against whom he had recently led a military expedition-suddenly bethought him that in that way might lie safety; his former enemies might be willing to grant him an asylum. His old friend agreed with him that there might be a chance of salvation in that direction, while there certainly was none in any other, although he commiserated him on the uneasy and unhappy life he would thenceforth have to lead, always in fear of arrest by the officers of justice or of being killed by the savages, while he could never expect to return to civilization.

To this Isio made the following reply: "No," he exclaimed, "I prefer savagery. The murmurings of envy, the oppression of the inferior by the superior, the enmity between rich and poor, all the horrors of inequality-are these the charms of civilization? What attraction is there in them?"

Meanwhile an urgent message came from a friend informing Isio that within a few hours the decree for his imprisonment would be made out, and that he had better act accordingly. He therefore determined to put his plan into execution at once. He sold his new house and all his other property except a fine horse, his arms, and some books and instruments of magic which he had studied in Manila, and then, accompanied by a single servant, as faithful as he was brave, he fled to the mountains to seek a refuge in their forests and in the huts of the Igorrotes. With these savages he at once assumed the part of a missionary. He exhorted them to cease quarreling among themselves, explaining in his sermons that the Supreme God of Heaven, who had created all things, certainly had not made the difierent races of men in order that they might destroy each other in constant warfare. He
also strengthened his fame and authority no little, and demonstrated his superiority over the native "medicine men" by means of the apparatus for prestidigitation and magic which he had taken the precaution to carry with him to the mountains. By such means he acquired great ascendency over the natives, and was looked up to by them as a great and wise chieftain. He remained long with the Igorrotes in the capacity of civilizer until the Spaniards, learning of a new and large municipality which he had organized near the Ilocanos, prepared to attack it. Isio anticipated them, however, attacked the ancient llocano fortifications, captured their arms and camnon, and took possession of the mountain passes, from which he harassed the Spaniards for many years. He was finally killed in battle in 1831.

## INSYRRECTIONS AND POLITICAL WRITINGS.

Amongst such a people as the Filipinos, who are proud, sensitive, ambitious, rcsentful of slights and insults, insurrections were inevitable, and they began in fact soon after the conquest. The earliest native revolts were partly resistance to the "reduction" of villages to pueblos on the Spanish plan, and partly arose from the attempts of the Spaniards to introduce forced labor, upon the system employed in Mexico and Peru. They were isolated outbreaks without systematic organization. The first large rising which showed an extensive organization occurred in 1762, and is interesting because of some resemblance between its events and those of 1898.

In the former year, England being at war with Spain, one English fleet took Habana, while another dispatched from India with a considerable land force, appeared before Manila, which was unprepared for defense, and captured the city. The acting governor-general, an archbishop, promptly surendered the whole archipelago to the English, under protest, however, from the lieutenant-governor, who opposed the English with an army mostly composed of natives. A native named Silan, a man of education and ambition, took advantage of this situation to bring to a head an insurrection he had been fomenting for the purpose of ridding his country of Spain. Silan, like Aguinaldo in 1898, when the Americans arrived, was willing at first to join forces with the attacking foreigners against the Spaniards, but subsequently withdrew from alliance with them. This insurrection extended over several provinces, and was only ended by the assassination of Silan after the English had withdrawn on the conclusion of peace in 1783. Between that revolt and those of this century the Spanish colonial policy was so changed as to permit intercourse between the colonies and other countries, and the admission of foreign trade to Manila gradually introduced modern ideas into the islands and other knowledge than that which had come unaltered from the Spain of the past. There soon appeared a spirit of emulation and a desire to take a place in the world on the part of educated Filipinos, who had risen to such a degree of social recognition as to hold positions in the Spanish army as well as in the church, and several of the earlier insurrections of the nineteenth century were instigated by Filipino military officers whose ambition had been thwarted by being removed to make room for Spaniards, and whose resentment was aroused by the haughty and overbearing demeanor of the latter. - Preferment in the church also became barred to native ambition by the advent of peninsular Spaniards, who flocked to the archipelago upon the suppression of the religious orders in Spain and filled positions which had previously been open to Filipinos. The Spanish friars, too, like the Spanish military officers, from easily understood reasons looked upon their native brethren as an inferior and uneducated class (although they were themselves their teachers), while the Filipino priests were left in subordinate positions and in some cases were subjected to indignities.

Dissatisfaction with the existing state of things in the islands, encouraged by the democratic movement in Spain in 1868, increased to such an extent that the Spanish Government proposed plans of reform in the island government in 1870. The situation was becoming intolerable and a new spirit of resistance was becoming evident.

The insurrection of 1872 appears to have marked the turning point in the scope and character of the revolts. Previous to that time they had been of a purely military character, the people taking little interest in them, but the revolt of 1872 was on a larger scale and had more political sympathizers than before. It was suppressed in a fer days, and the Government discovered that many influential people were implicated in the movement. A number of them were arrested and deported to the Ladrone Islands. Among those who were executed for complicity in the insurrection were three native priests, named Burgos, Zamora, and Gomez, whose fate excited the greatest sympathy amongst the common people and left an undying remembrance. ${ }^{1}$ After this event the well to do and educated classes began to take a greater interest in politics. It was seen to be intolerable that the weal or woe of families should depend upon the caprice of friars and officials. The latter, besides, were held in small respect, because with every change of ministry in Spain came a new batch of them to the islands, who knew nothing of the country and whose only object was to get as much money as possible in the short time they had to stay. Over them the influence of the friars was supreme, both from their knowledge of the country and from their infuence at Madrid, where they were believed to be the mainstay of the Spanish power in the islands and the indispensable intermediaries between the Filipinos and the Government. From various accounts it appears that the friars made a tyrannical use of their power. They are charged with causing the arrest, deportation, and even the death of persons, often men of wealth and position, who ventured to oppose their policy by favoring reforms, and by their connection with the Government and their intimate relations with all classes of the people their influence was far reaching, while their hostility was justly to be dreaded. ${ }^{2}$

Notwithstanding the danger of arrest and deportation for every Filipino who was suspected of liberal tendencies, a party was formed after the insurrection of 1872 , comprising the wealthy and influential classes, the object of which was to secure representation in the Spanish Cortes and the exclusion of the friars from the parishes and their return to the monasteries, or even their expulsion from the country altogether. This party was supported by the native secular clergy, to whom the Filipinos are attached and who were to supplant the friars in the parishes. This morement was, naturally, strenuously opposed by the friars, whose intolerance and persecution of the liberals became, if possible, more intensified than ever. This line of conduct was a fatal mistake on their part, as Professor Blumentritt points out, because the opening of the Suez Canal (in 1869) soon brought the Philippines into clocer contact with the European world and enabled the educated Filipinos to participate in its intellectual movement.
As the censorship prevented a propaganda of liberal ideas in the archipelago the Filipino liberals established a paper in Madrid in 1892, called La Solidaridad, which maintained the rights and demands of the Filipinos and was supported by subscriptions from them. All the staff of this paper were Filipinos and included the unfortunate Dr. Rizal, Manuel del Pilar, the lawyer, and Antonio Luna, names since well known in the United States. The friars, on their part, established an opposition paper, which published certain opinions upon the Filipinos, which were promptly translated into the native language and sent home to be distributed among the people and fan the growing flame of rebellion.
The instruments of actual insurrection which came into play last were the secret societies. Free masonry, "infamous masonry," as the Spanish authorities called it, played a conspicuous part in the preparation for the last insurrection, both as a propaganda of ideas of liberty, cooperation, and organization, and socially, by bringing Filipinos of the upper classes into association with Spanish officers and other Euro-

[^74]peans on equal terms, whereby they were enabled to form a correct idea of their own capabilities. For three hundred years the friars had taught the Filipinos to regard the Spaniards in a paternal light, but with the widening of their intellectual horizon and contact with their erstwhile superiors in the lodges and clubs, a sense of equality was developed in the Filipinos and they came to look upon their relationship to Spaniards in a far different light. There were twenty-four Masonic lodges in Manila alone in 1896, besides one in nearly every pueblo in the archipelago, affiliated with the Grand Oriente of Spain, notwithstanding that it was dangerous for a Filipino to be even suspected of being a Mason in the years between 1872 and 1896.

Meanwhile a secret society was formed among the lower classes, called the Katipunan, the object of which was to expel the friars and free the country from the Spaniards. Its organization was partly Masonic and partly like that of the Chinese secret socicties with perhaps a touch of the Italian Mafia and Camorra. Its origin was largely due to the intolerable condition of the peasantry. As is now well known in the United States, a considerable part of the cultivable land in the Philippines had come into the possession of the religious orders, while the small farmers, or peasants, whose ancestors occupied these lands long ago, have come to be treated by the friars as mere tenants, and as such their rent has been raised in recent years to such a degree as to cause them serious financial distress, to which the friars have added by levying upon their property for payment. In cases where suit was brought to contest the title of the friars to the land it has been decided in their favor by the courts.

The situation of the Filipinos a few years before the insurrection of 1896 was, therefore, as shown by the preceding history, as follows: There was no liberty of discussion or of the press. Members of the wealthy and influential classes who were suspected of liberal tendencies lived in constant fear of arrest and deportation, or even death, while the lower classes were oppressed by taxes and practical serfdom, and there was no legal redress for either. Under these circumstances it seemed to those who had learned what freedom is that it was worth securing, even at the risk of sacrifice of life and property. But it was also seen that an insurrection, if undertaken at all, must be general and well prepared. Organization was, therefore, instituted, and other measures were taken several years before the actual outbreak was intended to occur, in order to make it successful, but a betrayal of the plot in August, 1896, just before all measures were completed, revealed to the astounded Spaniards that they had been living upon a political volcano and that thousands of Filipinos were secretly banded together for the purpose of driving them out of the country. The Spanish officials acted with stem promptness as soon as the plot was discovered. Hundreds of the leading Filipinos were arrested, tried by court-martial, and shot, and hundreds more were transported. The prisons were speedily crowded with the accused awaiting sentence, and, as the names of all concerned in the conspiracy were now known to the autherities, it was seen that it was better to die fighting than be arrested and shot, or perish slowly in prison, and so, in August, 1896, the Tagale insurrection broke out, prematurely, with Aguinaldo at its head.
The following extracts are taken from letters between Masonic lodges in the Philippines and the Grand Oriente of Spain, and other papers, which were seized ioy the authorities in Manila in 1896, and were published in Madrid in 1897 by W. E. Retana, the well-known bibliographer of Philippine publications. They show the germination of the seed of revolt, the propagandism, the plan of organization, and the course of events until the final outbreak. The letters are headed by symbolic letters, which will doubtless be understood by Masons: Thus, one begins: $A L . \therefore$ G. $\cdot \square$ D. $\therefore$ A. $\therefore$ D. $\therefore$ N..$\cdot$ Liberty, Equality, Fraternity, Universal Masonry, Spanish Family. The Resp. $:$ Lodge Nilad, No. 144 of A. $\therefore$ L. $\therefore$ and A. $\therefore$ Masons of the Philippines, regularly constituted in the federation of the Gr. $\therefore$ Or. $\therefore$ of Spain, sends $\mathrm{S} . \cdot \mathrm{F} . \therefore \mathrm{S} . \therefore$ to the Resp. $\triangle$ Bay. And the rest have some similar heading.

One of the earliest of the series speaks of the gratification felt at headquarters, in

Madrid, at the establishment of new lodges in Manila, and commends the zeal and activity of the brethren, but cautions them to be prudent in selecting members and reminds them that they are engaged in the work of human regeneration, which is to be effected through the agency of Free Masonry. Another letter declares that all were working for the emancipation of humanity, but always with a due regard for the laws of " our country."
Some Masonic letters were betrayed into the hands of the friars, who endeavored to show, in their paper in Madrid, that Masonry was fomenting a separatist war in the Philippines. To this Marcelo del Pilar replied in La Solidaridad (January 15, 1895), that if a lawful propaganda is sufficient to persuade the Government to cease its liberty-destroying régime in the islands, if it can procure personal security, the sanctity of the home, the inviolability of conscience, the subordination of civil and religious institutions to the requirements of 1aw and morals, if a propaganda could provide a remedy for abitrary rule and harmonize authority with popular liberty, there would be no need of a separation from Spain. An insurrection, he says, is uncertain in its results and should only be appealed to as a last resort.
In another letter to Philippine Masons he urges upon them the necessity of an active and militant "collectivism." What is wanting in the Filipino organization, he says, is the "collective life." The Filipinos must rectify the prejudices which have grown up against them, under the instigation of the friars, ever since they began to show signs of political life and symptoms of ambition. He laments the withdrawal of certain rich men from the work, but urges the brethren to have the utmost faith in the cause of their redemption. "Faith," he says, "can remove the mountains and seas which have separated the nations of the earth. Why should it not amihilate the differences of judgment and esteem between us and our compatriots who are surely bound to us by a common interest and a common calamity? Let us not suffer our redemption to be effected by outsiders rather than by ourselves. Shame and our own dignity demand that we should conquer it ourselves. In any case the brethren must redouble their efforts and in that way make up for diminished numbers. As to organization," he adds, "plans are not what is needed but habits of dirigibility, that is, habits of discipline, of the collective life, of mutual benevolence toward our coreligionists, of working together harmoniously, and with obedience to those whom we have elected for our officers." He refers to the Cubans as an example of how blood and money can be wasted through want of cooperation and harmony. They knew how to struggle and die but did not know how to conquer. "Let us," he admonishes, "take warning by them and remember that each individual must learn to conquer himself and submit to the authority of the common good, because he who does not know how to conquer himselt will never be able to conquer his enemies. For God's sake," he cries, "let us be warned in this respect, because the happiness of our country is at stake in the campaign upon which we are about to enter."

In another letter the Masonic brethren are urged to study the political, military, and economic conditions of the country, and to develop the new municipalities, because Free Masonry is the brain of the pueblos. "Suppose," the writer asks, "that Spain should grant us to-morrow the share in the government we have been demandingso long, what concrete and positive solutions of our political problems have we ready to put in practice? What reforms have we thought out to ameliorate the condition of the country and develop its resources? These are the practical questions the lodges ought to discuss, and all ought to take part-the merchants discussing the trade of the archipelago, the farmers its agriculture, and the soldiers military matters."
A letter from the lodge Modestia, in Manila, to the Grand Oriente of Spain, in February, 1895, complains bitterly, in highly rhetorical language, of the persecutions of the Masons, their arrest and deportation out of the country, and the invasion of their homes, under the pretext of discovering conspiracies, by persons whose will
was the only law. The letter contains this significant passage: "We have had," it says, "three years of Masonic experience, a length of time more than sufficient to demonstrate to us that if we are to enjoy the civil and religious liberty which is necessary to every people, the $7,000,000$ inhabitants of this country should belong to us absolutely. This is shown by our success so far. The slight improvement in municipal and provincial administration which is now visible is due to our efforts. We began by teaching the workmen the duties of citizenship so that they might know how to exercise the first of human rights when the time should come. The time did come and our labors were rewarded with triumphant success." The writer concludes with the hope that the Philippines might eventually become a Spanish province, with representation in the Cortes.

A paper was secretly printed in Manila in the Tagalog language (the censorship preventing open publication) with a title signifying liberty. It professed to be printed in Japan, and the first number contains a greeting to "Our beloved compatriots over the sea," and then proceeds as follows, in the Spanish translation given by Retana. "Aitcr three hundred years of slavery which Mother Spain has done nothing to relieve, the Filipinos are now only begging the Spaniards for a little consideration and clemency, and their entreaties are met with imprisomment and exile. There is no longer a Mother Spain with a son in the Philippines. Instead there is one people that robs and fattens upon what is not its own, and another people which has become weary of thankless toil. Henceforth there is no hope for the Filipinos except in their own strength, and they must defend themselves. We know too well," the writer adds, "that this course will cause great terror, will originate merciless persecution and bring every kind of cruel punishment upon our countrymen. But what signifies the lives of hundreds of men compared with the happiness of millions of our brethern?"

The same paper contained an article entitled "What Indios ought to know," which gives a picture, perhaps slightly overdrawn, of the happy Arcadian pre-Spanish condition of the Filipinos, the plenty in which they lived, their trade with Japan, their friendship with other nations and their knowledge of reading and writing. Then it describes the arrival of the Spaniards, their pledges of alliance and peace, sealed with blood (the pacto de sangre between the Indio King Sicatuna and Legaspi, who represented the King of Spain), and their early violation of their promises. The writer then goes on to complain that the Filipinos have worked and fought for the Spaniards for three hundred years, and for what? The Spaniards have broken every promise, have corrupted and perverted the Filipinos and caused them to forget their ancient ways and honorable station. Every protest on the part of the Filipinos has been met by imprisonment and exile far from their beloved wives and children. He complains in rhetorical language of the calamities brought upon his people by the Spaniards and declares that nothing can be expected in the future except further calamities, additional sufferings, worse cruelties, more sneers and stricter slavery, and points out that the Filipinos have none to help them but themselves. The time has come for them to show that they have feelings of their own, sentiments of honor, a sense of dignity and shame, and bravery. "Let us exert all our strengith freely," he exclaims, "in the perfect faith that we shall eventually conquer, and sing the song of triumph for the happiness which is drawing near our birthpice."

The foregoing extracts, it will be seen, show practical ideas and are free from the commonplaces and conventional cant about liberty of which the world is now somewhat weary. The following is an abstract of an allegory which was published in the same paper as the preceding articles, and was also translated into Spanish. It shows the skilled hand of a literary man who knows how to impress the imagination and memory of his readers by a style which is more effective than blunt assertion or barren entreaty. The point to be noticed is that the author knew that the common people amongst his Tagale countrymen would appreciate and follow his sustained
imagery. In the outline here given no attempt is made to preserve the rhetoric or literary merit of the original. The anthor's idea was to arouse patriotic emotions by means of a dialogue between Liberty and a Filipino youth, the substance of which is as follows: A young man is sitting in an attitude of deep dejection in a dimly lighted room, when he hears himself addressed in pitying tones, and on looking up he beholds a faintly outlined shining presence standing by him. The apparition asts why he is so sorrowful. He answers that his grief is incurable nor can it be alleviated by friendly counsel, and he asks the apparition why it has come to interrupt his mournful thoughts. To this the spirit replies: How long shall ignorance be the cause of the calamities of men and nations? How long before they will learn that it is through me alone that true and periect happiness can be diffused over the earth? The youth is filled with awe before his spiritual visitor but ventures to ask who she is, to which the phantom replics: Alas! you, too, have never heard of me. How could you, indeed, as it is more than three hundred years since I left this land and, as your race has chosen to worship false idols, all remembrance of me has been effaced. Do you ask who I am? Then listen. I am the source of all the greatest and most glorious deeds which have ever been done for humanity. For my sake crowned heads have fallen and thrones have been overturned. I extinguished the fires of the holy inquisition in which the friars tortured thousands of men in former times. For my sake men unite for a common good, each voluntarily surrendering his own self-interest. Through me slaves are ransomed and raised from the mire of degradation and shame to crush the pride and cruelty of their masters. All peoples who are under my protection have acquired the happiness and abundance they enjoy through me, and through me alone have they made progress in civilization, as in Japan, America, and elsewhere in the world. Free thought, too, which sounds and explores the depths of science is reached only through me. Wherever I reign tears are wiped away and the bosom, no longer oppressed by the fear of tyranny and cruelty, breathes freely. I am Liberty!

The words put in the mouth of the young man are also calculated to arouse a desire for revenge in the hearts of Tagal readers. After explaining that the cause of his sorrow was the spectacle of his suffering country, the youth addresses Liberty thus: If you were to see the contempt and scorn with which my countrymen hare been treated, the want they have suffered, and the unjust laws under which they have been compelled to live, you would hasten to their protection again. Hear what my brothers say: "I am hungry," says one, "and he [i. e., the friar] who teaches me to give meat to the hungry says to me, 'eat the scraps which fall from my richly laden table.' I am thirsty, and he who teaches me to give drink to the thirsty says, 'drink your own tears and sweat.' I am naked, and he who teaches us the commandment to clotherthe naked says, 'at this moment I am preparing to wrap your whole body in chains." Another says, "I see my honor trampled under foot by a cura, or a Spaniard, or a rich man, and the judge, who should be the pillar of justice, answers my complaint by saying, 'this is a pestilent fellow, a bad man, a bandit; to prison with him.'" When my countrymen ask for a little love, a little clemency and pity, the judicial and spiritual chiefs who govern them reply "these are filibusters, enemies of God and Mother Spain; to prison with them."

In view of these things the youth asks Liberty whether he has not good cause for sorrow and weeping. "Sorrow and weeping!" cries Liberty contemptuously. "This is no time for weeping, especially for a young man; there will be time enough to weep when you have no more blood to shed and your enemies have no more lives to lose. There must be no stay as long as the cruel and ignominious executions of Fathers Burgos, Zamora, and Gomez and the imprisonment of Rizal are unavenged."

No. 19 of the series is a "monstrous" document of Filipino Masonry, as a Spanish official called it. It gives directions for the guidance of the "triangles" when the insurrection should begin. It is dated June 12, 1896, and provides-Firsi. That all orders
shall be strictly and implicitly obeyed even to the smallest details, since the least departure might jeopardize the whole plan. Second. When the signal agreed upon of $\mathrm{H} . \therefore 2 \therefore$ Sep.$\therefore$ should be given, each brother must perform his part without hesitation or any considerations of relationship, friendship, or gratitude. Third. Those who, through weakness or cowardice, or for any reason, do not perform their duty, know the fearful punishment that awaits them for disloyalty or disobedience to this G $\therefore \mathrm{R} \therefore \mathrm{L} . \therefore$ Fourth. After the attack upon the Cap $\therefore$ General and other authorities the loyal will attack the conventos and kill their infamous inmates, but must not touch the valuables they contain, which will be taken care of by the committee appointed for that purpose. No one of the brethren is allowed to take anything belonging to the treasury. Fifth. Whoever disobeys the foregoing order will be regarded as a malefactor and punished accordingly. Sixth. On the day following the rising the committee appointed for the purpose shall bury all the bodies of our hated oppressors in the field of Bagunbayan [where the Filipinos had been executed], and a monument shall be erected there commemorative of the independence of the G $\therefore$ N $\therefore$ F $\therefore$ [Great Philippine Nation]. Seventh. The bodies of the friars shall not be buried but shall be burned in just return for the wrongs done to the noble Filipinos during three centuries of their abominable domination.

On July 5, 1896, a lieutenant, D. Manuel Sityar, wrote to the civil governor of Manila that he had noticed many suspicious circumstances among the natives for some months and had discovered that an extensive recruiting was going on for some secret purpose. He had been informed that there was a widespread secret organization, the members of which signed an agreement with their own blood not to reveal the object of the society on the forieit of their lives. There were agents of the society everywhere. Its object was political and anti-Spanish, and it was expected that it wouid receive support from Japan. This society was the Katipunan. On August 13, an Augustinian friar, Father Augustin Fernandez, wrote an urgent letter to the governor, informing him that certain persons who had been arrested in his parish were the prime movers in the Masonic or Separatist meetings there, and that if they were to return to their ward he could not answer for the consequences. He added, benevolently, that a little bloodletting is sometimes necessary to relieve an invalid people, and that if two or three of the most conspicuous leaders of the movement were to disappear without anyone knowing what had become of them the rest of the people would become quiet. On August 17, Father Gil, the parish priest of Tondo, one of the suburbs of Manila, on information received from a parishioner, visited the printing office of the Diario de Manila and found documents, in Tagalog, of the Katipunan Society, which inculpated a large number of people. The Government now became thoroughly alarmed and began making arrests of the persons implicated in the society. Informers, both Masons and members of the Katipunan, came forward on promise of pardon and revealed the whole affair. The official examinations disclosed the fact that the membership of the two societies included all classes of society, from mechanics and clerks to lawyers, army and navy officers, capitalists, physicians, and priests. Everything was discovered, the houses where the meetings of the societies were held, the names of those present, and the transactions. The object of the "conspiracy" was separation from Spain. One witness, an army officer, admitted that he was a member of the patriotic society, Katipunan, the object of which was to demand from Spain the independence of the islands, and in case of a refusal to start a revolution, relying upon the assistance of Japan and part of the army. Manila was to be attacked and the native soldiery there was to join the revolutionists. The names of wealthy citizens (Filipinos) were given who were to aid the movement.

These examinations were held from the 23d to the 26th of August, and on the 31st 55 persons were shot in consequence of the evidence obtained. The object of the Katipunan was essentially to insure separation from Spain. A physician testified
that the purpose was to unite all Filipinos in the idea of demanding representation in the Spanish Cortes, and equality before the law with the provinces of Spain. If this was not conceded the plan was to raise money, promote a general rising, and declare the Philippine Islands independent of Spain, under the protectorate of Japan, but without annexation. The names of Masonic revolutionists given by this witness included those of army officers, gobernadorcillos, and other people of the upper classes. He had been one of a committee to go to Japan as representative from a Másonic "council" in the Philippines. Members of the Katipunan society were united by the pacto de sangre. The pacto de sangre was solemnized by making a cut in the left forearm and signing the oath of loyalty and secrecy with blood from this cut. Some fantastic features of the ceremony are described, which were clearly intended to make a deep impression upon the ignorant novices. Breaking the oath was punishable with the severest penalties, even with death. It appears that commissioners went to Japan to negotiate for the purchase of 100,000 stands of arms, but they also had a political mission.
This witness said that a society called the League of the Philippines had been formed some years previously for the purpose of establishing workshops and stores, promoting traffic and industries, and opening a bank to collect funds for an insurrection, which was to separate the islands from Spain. Its supreme council was in Manila, with subordinate councils in other towns of the province of Manila and in the other provinces, the president of the superior council being in correspondence with the presidents of the other councils. This society was dissolved in 1893, on being discovered, and gave place to the Katipunan.
How deep and serious were the feelings of the patriotic insurgents may be judged from expressions in the letters. "If God protects us," says the chief of a lodge, "in the battles we are about to undertake, we shall suffer no harm. Therefore strengthen your hearts and let us all be assured that our country will be victorious, and may the Spaniards who have tyrannized over us in past years perish! Long live our nation! Long live the archipelago! The Lord God created us Filipinos, and let those among us who are not with us change their minds and help us destroy the servitude in which we are living, and let us all unite in the one purpose to banish fear and defend our race with all our might. That is God's intention for us. He who loves you with a constant love salutes and embraces you." [Signed with a symbolical name, September 30, 1896.]

A letter from the civil governor of Manila to the minister for the colonies, dated October 1, 1896, declares that the insurrection was planned in the lodges of the "infamous masonry," of which there were twenty-four in Manila. He describes the seizure of documents and arms, and the arrests, and makes this profound observation. "The investigations," he says, "have brought out the fact that it is not a mere insurrection, or a war for independence, that is in question, but a war of races which has for its object the extermination of the Spaniards," and he quotes the testimony of a witness who explained the object of the Katipunan, in terms "as laconic as horrible," to be the death of the Spaniards and the possession of the islands. The governor adds that 163 persons had been deported to the Caroline islands and 140 to Sulu, while others were to be sent to Spain. Many were awaiting the sentence of death in prison. He visited the prisons every day where more than 2,000 persons were confined, and describes the simple and artless, if antiquated, method of keeping them incomunicados, or from communicating with each other. There were so many prisoners that they could not be kept in solitary confinement but were chained, in batches of five, to the pillars in the large hall of the prison with a guard over each lot. They were made to lie down and were only permitted to sit up to eat. Any attempt at conversation was immediately checked by a sound flogging administered by the guards.

The governor's opinion was that every pueblo whose officials had participated in the rebellion should be subjected to an energetic and severe "repression" which
would restore the "normal" life. He mentions by name the "millionaire family Abella," and says that many other persons of wealth, importance, and social position, were implicated in the rebellion. ${ }^{1}$ Notwithstanding the arrests and executions, initiation into the Katipunan went briskly on. Hundreds were pardoned by the Government only to relapse and rejoin the society.

No. 58 of the series is a document of the Katipunan society with the heading K. K. K. Acta, and contains an oath signed by Emilio Aguinaldo and a number of others, declaring that neither they nor their children would ever obey the Spaniards, but instead would obey only the laws of that pueblo whereof D. Baldomero Aguinaldo, chief of Katipunan, was head; that they would obey his orders for the purpose of escaping from the abyss which the merciless Spaniards had opened for them; and that they were ready to shed the last drop of their blood to prevent subjugation by Spain. There are other oaths in the same strain.

The insurrection broke out at the end of August, 1896, and continued until the peace of Biyak-na-Bató at Christmas, 1897. The conditions of the treaty included a complete amnesty to the Filipinos, together with an indemnity. It was asserted by the Filipinos but denied by the Spaniards that besides the public treaty there was an understanding that the reforms for which the Filipinos had been struggling so long would be granted within a certain time. The failure to grant these concessions, as time went on, gave the Filipinos an excuse to renew hostilities when the Americans arrived. After that event the Spanish governor endeavored to conciliate the Filipinos by promising to grant the reforms in question, but it was too late.

The circumstance that the Spanish governor was compelled to make a treaty with the insurgents and promise concessions, shows how much the status of the Filipinos had changed since the previous insurrection. They had conquered recognition as an organized body which must be dealt with as a power and could no longer be suppressed by the mere execution of individuals. At this point in their history the Americans stepped in and took the place of their former masters, the Spaniards, thus presenting a new superior power for them to reckon with.

## STATISTICS OF EDUCATION.

Higher education.-The University of Santo Tomás, which has already been mentioned and which was founded as a college in 1611, ${ }^{2}$ was raised to the grade of a university by Pope Innacent X in 1545, with the two faculties of theology and arts, to which was added the faculty of law in 1734 by Clement XII. It received the title of "royal" in 1708, the King of Spain, Philip V, becoming its protector, and that of the University of Manila by royal decree of November 6, 1870. Its faculties were then extended to include those of medicine and pharmacy. The university has always been from its foundation under the Dominican order, and is supported by the funds thereof. The rector of the university is ex officio head of the secondary instruction in the "colleges" throughout the archipelago which are under that order.

The Spanish minister of the colonies in 1870, Moret, complained of the backward condition of learning at the university. There was no instruction which satisfied the demands of modern civilization. There was no instruction in medicine or pharmacy, little in the natural sciences, history, philology, or languages, and only rudimentary instruction in law. Nor was any attention given to the study of the native languages, history, or customs, a circumstance which explained how it was, he declared, that it had been impossible for the Spanish civilization to come in contact with the native for a long time, the religious orders having reserved that intercourse

[^75]for themselves as a powerful lever of authority and intervention. This was the state of things, he remarked, at a time when the Filipinos were showing more and more that they were actuated by aspirations which required freer space than the narrow and monotonous circle of ecclesiastical instruction. Any attempt to secularize the instruction of the university would, he believed, be utterly futile, owing to the supremacy of the orders in the islands. He recommended modernizing the courses by adding the faculties of medicine and pharmacy, and reorganizing the others to bring them up to the requirements of an European university. At that time (1870), Zobel, before referred to, a competent critic, complaining of the lack of books of reference and modern journals in Manila, said of the university library that it contained no books except antiquated works of Spanish jurisprudence and theology.
In 1887 the library consisted of about 12,000 volumes, consisting principally of works on theology, social science, law, and philosophy.
The Bureau is indebted to the courtesy of the rector of the university for a number of the annual addresses delivered at the opening of the scholastic year, from 1892 to 1896, which were written by professors of the university, all of whom were members of the Dominican order. These addresses deal with metaphysical and theological subjects, and are analogous to the baccalaureate sermons at college commencements in this country. The point to be noticed about them is that they present the views of modern scientific writers on the subject of discussion as well as those of ancient and mediæval philosophers, and are therefore in a manner guides for the students to the literature of modern philosophy. In one occurs this passage: "A university which desires to respond to its sublime mission must fulfill two duties, each equally sacred: that of opening its doors to all the doctrines of truth, ancient or modern, from whatsoever source they may come, and the other, that of anathematizing and combating all the doctrines of error under whatever form or name they may appear." The orator on this occasion (in 1882) was combating positivism by opposing to the purely materialistic theories of man's nature, based on his organic structure and biological relations, the ideas of personality, the sense of moral responsibility, etc., which can not be explained by structure. He congratulated the university that it had never in the three centuries of its existence permitted its official instruction to be defaced by any of the fundamental errors which have crept into the world from time to time.
The other addresses are conceived in much the same vein. They are metaphysical and theological dissertations in refutation of "rationalistic" philosophy. Antiquated modes of thought may be observed here and there, but the names of Kant, Comte, Littré, Taine, Haeckel, Helmholtz, Huxley, Herbert Spencer, Wundt, Bain, Du Bois-Reymond, and other modern writers appear side by side with those of Aristotle, Plato, St. Thomas Aquinas, and Descartes, while the modern natural-historical views of man and society and the mechanical and chemical theories of life processes are brought to the notice of the students. The curious among the latter must have found access to the original works in some way, one would suppose. At any rate, the existence of modern speculative philosophy was at least pointed out to them in these addresses if nowhere else.
The following programmes of the university course are taken from the discourse by Fr. Pedro N. de Medio, at the annual opening of the university in 1896. The course of lectures is for 1896-97.

FACULTY OF THEOLOGY AND CANON LAW.
Preparatory: Ontology, cosmology, and theodicy.
Foundations of religion and theological positions.
Institutions of dogmatic theology.
Ecclesiastical history, sacred hermeneutics, and the Scriptures.
Moral theology and sacred eloquence.
Canonical law, general ecclesiastical discipline, the Patronato de Indias, and ecclesiastical proccedings and decisions.

## Faculty of JURISprudence.

Preparatory: Metaphysics; general Spanish literature; critical history of Spain.
Elements of natural law; institutions of canonical law; economics and statistics; institutions of Roman law; Patronato de Indias; ecclesiastical discipline; Spanish civil law, common and forensic; general history of Spanish law; criminal law; political and administrative law; colonial legislation; mercantile law of Spain and of the principal countries of Europe; elements of finance; civil, criminal, canonical, and administrative proceedings; theory and practice of compiling public instruments.

Public international law; private international law.
The faculty with the title Notariado (notarial law) include substantially the same subjects as the above.

## FACULTY OF MEDICINE.

Preparatory: Advanced physics and chemistry; mineralogy and botany; zoology.
Descriptive anatomy; histology and normal histochemistry; anatomical technics; embryology; theoretical and experimental human physiology; private hygiene; general pathology with its clinic and clinical preliminaries; pathological anatomy; therapeutics; materia medica; writing recipes, with hydrology; hydrotherapy, and electrotherapy; surgical pathology; medical pathology; obstetrics and gynecology; diseases of children with clinic; topographic anatomy; surgical medicine with clinic and applications, ligature and bandaging; obstetrical and gynecological surgical and medical clinics; public hygiene; statistics and sanitary legislation; legal medicine and toxicology.
(The text-books are mostly by Spanish authors.)

## FACULTY OF PHARMACY.

Preparatory: Advanced physics; generalchemistry (daily lecture), zoology, botany, mineralogy.
Study of physical instruments and apparatus used in pharmacy, with practical exercises. Mineralogy and zoology applied to pharmacy, with the corresponding pharmaceutical material and practical exercises. Descriptive botany with the determination of medicinal plants, with corresponding pharmaceutical material and practical exercises. Inorganic and organic chemistry applied to pharmacy, with practical exercises (daily). Chemical analysis, especially of foods, medicines, and poisons, practical or Galenical pharmacy, and legislation relating to pharmacy.
(Text-books mostly Spanish. Fresenius is used for analytical chemistry.)

## FACULTY OF PHILOSOPHY AND LETTERS

Metaphysics; Greek; universal history; general literature.

## FACULTY OF SCIENCES.

Mathematical analysis; geometry; mineralogy and botany; general chemistry; lineal and topographical drawing.
It will be seen that the faculties of philosophy and letters and of sciences are much weaker than the others, particularly the faculty of sciences, which contains only a small proportion of the subjects which should be expected in a modern university. ${ }^{1}$

[^76]The attendance at the university in the academic year 1895-96 was divided among the faculties as follows:


The amount and quality of the instruction given at the university are criticised severely in testimony given before the United States Philippine Commission.
The College of San José was founded by the Jesuit Fathers in 1601, and was for some time chiefly maintained by donations from the families of the scholars. Subsequently money and property were contributed by various persons toward its support. During a considerable period it received aid directly from the King of Spain. Its original object was to educate the sons of Spanish inhabitants in virtue and letters.

In 1768 the Spanish Government, exercising its right of vice-royal patron, took the college from the hands of the Jesuits and eventually turned its administration over to a canon of the Manila Cathedral. Successive canons continued to administer its affairs under Government control until 1875. At this time an important decree was issued reorganizing education in the Philippines, wherein it was provided that the College of San José should give instruction in medicine and pharmacy. The Government placed the direction of the institution in the hands of the rector of Santo Tomás. From this time on San José has conferred degrees in medicine and pharmacy. San José is richly endowed.
It has been customary for wealthy people to send their sons to Europe and Hongkong for their higher education. No statistics are available to show how many receive their education abroad.
Secondary instruction is given in a number of "colleges" throughout the archipelago. Those under the university were the colleges of Santo Tomás and San Juan de Letran, in Manila, private colleges of the first class in Cebu, in Jaro (Leyte), in Nueva Caceres, in Dagupan, Vigan (Luzon), Guinobatan (Albay), and private Latin schools throughout the islands. These were all supported by the order.

Secondary education was also given in the Ateneo Municipal of Manila by the Jesuit Fathers, and this institution was better and more modern in its methods than any other in the archipelago. But although the Jesuits provided the instruction, the Dominicans held the examinations. The Ateneo had a capable faculty of 24 instructors, and was supported by the municipality of Manila.

The subjects taught in the college of San Juan de Letran include Spanish and Latin grammar, sacred history, Christian doctrine, geography, especially of Spain and the Philippines, Christian morals, Latin translation and analysis, elementary Greek, general history, especially of Spain and the Philippines, arithmetic and algebra, rhetoric, poetry, Christian morals, geometry and plane trigonometry, psychology, logic and moral philosophy, physics and chemistry, natural history, French, and English. This course is duplicated in the other colleges. The course in the college of Santo Tomás was more practical, and included industrial mechanics, mercantile arithmetic, bookkeeping and accounts, correspondence and commercial operations, political economy, mercantile and industrial legislation, geography and commercial statistics, French, lineal, topographical, and ornamental drawing. The ateneo municipal has also a practical course of mercantile arithmetic, political economy, mercantile correspondence, bookkeeping, and mechanics. San Juan de Letran was founded in 1620 by a charitable Spaniard who collected orphans and poor

Spanish boys in his house, fed and clothed them at his own expense, and taught them reading, writing, and Christian doctrine. This school received the aid of the governor and of King Philip II. It was combined by the Dominicans with another school a few years later. A number of other schools in the Philippines were founded in the seventeenth century.
The attendance at the colleges in 1895-96 was as follows:
San Juan de Letran . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5, 508
Santo Tomás . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 407
Ateneo municipal .......................................................................................... 759
Private college at Cebu ................................................................................ 502
Private college at Jaro (Leyte).............................................................. 209
Private college at Nueva Caceres (Albay) ................................................ 236
Private college at Dagupan (Luzon) ............................................................ 228
Private college at Vigan (Luzon) .................................................................... 130
Private college at Guinobatan (Albay).......................................................... 91
Total attendance at the private colleges of first grade .................... . 8, 070
Besides the foregoing colleges there were 67 private Latin schools in the archipelago, of which 23 were in the province of Manila and nearly all the rest in Luzon.
The course of "study in these schools included Latin and Spanish grammar, Christian doctrine and sacred history, general geography and geography of Spain and the Philippines, Latin translation and analysis, elementary Greek, general history and history of Spain and the Philippines, arithmetic and algebra, rhetoric and poetry, geometry and plane trigonometry, French. The attendance in 1895-96 was 1,915. These schools are under the charge of licentiates in philosophy or science, or bachelors of arts who have passed an examination for teachers, and are under inspectors, one of whom is appointed by the rector of the university, who is ex officio head of all the schools of the islands. Some of these schools only gave a one-year course, others two, and others three. The teachers are Filipinos. From a history of education prepared for an exposition of the Philippines in Madrid, in 1887, the following figures are taken regarding higher education in the islands: ${ }^{1}$
The university granted 1,186 degrees in theology, canonical and civil law, and philosophy between the years 1845 and 1820. The number of students matriculated in that period was 40,125 .
Between 1800 and 1882 2,282 degrees of doctor, licentiate, and bachelor were granted, while 23,233 students were matriculated, of whom 13,246 passed examinations. In the sixteen years between 1866 and 1886 over 4,000 students were matriculated annually at the university and the colleges of secondary instruction, of whom nearly 50 per cent passed the examinations. This shows that a large body of young men must have acquired at least the rudiments of education. An interesting table shows the nationality of the students in the university in the scholastic year 1886-87. In that year there were matriculated 123 European Spaniards, 93 Philippine Spaniards, 180 Spanish mestizos (Spanish Filipinos), 1,381 Filipinos, and 218 Chinese-Filipino mixed bloods, a total of 1,985 students. This makes the fullblooded Filipinos 69.57 per cent of the whole. The nationality of the Filipinos was ascertained from private information, not from open records.
It seems proper to introduce here an account of the normal school and several special schools which may be classified with secondary schools. The account is taken, omitting comments and criticisms, from the report of the Pbilippine Commission, Vol. II, and is the more valuable as it is evidently the work of one personally familiar with the working of the institutions.

[^77]Following the order of their creation, we must first take up the school for male teachers. The normal superior school for male teachers has two different characters.

When it was created by royal decree, dated December 20, 1863, and its management committed to the Jesuit fathers, it had only the "normal" character, but by another decree of the General Government, dated November 10, 1893, and approved by royal order dated April 11, 1894, it entered the "superior" category. Education in this school comprises two grades, elementary and superior. By the elementary education the title of teacher of primary elementary instruction is acquired, and it is divided into three terms. Nore complete education is required in order to obtain the title of superior teacher. In addition to said titles the title of assistant teacher of primary instruction is obtained in this establishment by those who pass special examinations which are held four times a year.
In this same school there is a school of primary instruction for boys not living in the school, which is conducted by scholars in the advanced courses under the direction of a professor, and thus the practice necessary to the profession of teacher is acquired. Article 9 of the regulations of this school reads as follows: "Both boarding and day scholars in the normal school must possess the following qualities in order to be admitted: First, to be natives of Spanish dominions; second, to be 13 years of age, which must be proved by certificate of baptism or other public document of equal validity; third, to be free from contagious disease and to be sufficiently vigorous to perform the tasks and duties of a school-teacher; fourth, to have observed good conduct, which must be proven by the certificate of the parish priest of the town of their birth and home; fifth, to speak Spanish, have some knowledge of Christian doctrine, read and write ordinarily well, know something of Spanish grammar, including regular verbs, and to know the four fundamental rules of arithmetic, all of which shall be required of them in a previous examination held by the examining board appointed by the director."
The courses studied were as follows:

FIRST ELEMENTARY COURSE.
Christian doctrine expounded; elements of sacred history; the Spanish language; theory and practice of reading; theory and practice of writing; arithmetic; principles of general geography and the geography of the Philippines; plain drawing.

SECOND ELEMENTARY COURSE.
Catechism expounded; sacred history (third grade); history of Spain; theory and practice of reading; theory and practice of writing; arithmetic; Spanish grammar; plain drawing.

THIRD ELEMENTARY COURSE.
Catechism expounded; Spanish grammar; geometry; surveying; pedagogy; agriculture; plain drawing; deportment.

## SUPERIOR COURSE

Advanced pedagogy; legislation in force in primary instruction; ideas of religion and morality; universal history; algebra; industry and commerce; common phenomena of nature.
Instruction given boarding scholars was more complete than that given day scholars, for the former had an academy of music and a gymnasium, classes which the day scholars did not have the benefit of.
Still, it may be said that the instruction was good, although the plan of studies left much to be desired, for it had the same defects as the school for female teachers, as wiil be seen hereafter. Between boarding and day scholars about 500 youths attended the classes of this school, half of whom were boarders. The school was supported by the Government.
The normal school for schoolmistresses had a double character like that for masters, but its conditions were different.
Until the year 1893 the title of elementary schoolmistress was conferred by the director of civil administration, after an examination which was undergone by the graduates of the different colleges in Manila and in the different provinces before an examining board organized by the civil governor and the corregidor of Manila.
These examining boards were composed of seven persons, among whom were the civil governor, who was president, the rector of the cathedral, the director of the
normal school, and the directress of the municipal school for girls, who was a Sister of Charity. The other two members were elected and changed every two years.

The examinations were not strict, for they dealt with subject-matter which was scarce on account of the deficient programme of studies.

The courses•on which these examinations were held were the courses of the whole primary instruction.

The education of schoolmistresses from said year 1893 until the termination of Spanish sovereignty was very different.

In fact, by royal decree dated March 11, 1892, and put into force in the following year, the superior normal school for schoolmistresses was established in Manila, in charge of the Augustin Nuns of the Ascension, who came from the Royal College of Santa Isabel in Madrid. This school also issued titles of schoolmistress of two grades, elementary and superior.

The ancient college of Santa Isabel in Neuva Caceres, in charge of the Sisters of Charity, can also issue titles of normal-school mistress, for this right was granted them by royal decree of the General Government of June 9,1875 , and approved by royal order September 27, 1880. The college at Bigan, in charge of Dominican nuns, was granted the same right by a decree whose date we forget.

The subject-matter of the instruction in both branches of this school comprises the following courses:
(1) Religion and morality (expounded catechism and sacred history); (2) Spanish grammar; (3) elocution; (4) arithmetic; (5) penmanship; (6) general geography and geography of Spain in the Philippines; (7) history of Spain and of the Philippines; (8) hygiene and domestic economy; (9) practical industry; (10) geometry; (11) indoor exercise; (12) pedagogy; (13) natural science; (14) music, vocal and instrumental; (15) practical instruction in teaching; (16) literature; (17) drawing as applied to practical work; (18) ideas of law and its application to the ordinary uses of life; (19) French; (20) English; (21) the teaching of deaf mutes and the blind; (22) finance.

The ideas of law were not taught, which was also true of che courses of instruction to deaf mutes and the blind, fine arts, French, and English.

For the rest, the instruction given, if not complete, was sufficient. Studies for the elementary grade lasted three years and comprised the courses stated as far as No. 11, inclusive, for the first and second years, and from courses 12 to 15 for the third year.

For the superior grade the courses of the former years were studied more extensively, and courses Nos. 16 and 17 were added, and geometry substituted for drawing. The remaining courses, Nos. 18 to 22 , are optional for scholars who have passed the fourth year, but up to the present time there has not been any case of any scholar having passed examinations in them.

## SCHOOL OF ARTS AND TRADES.

This has been recently created in the Philippines, and dates from the month of March, 1891.

By a superior decree of November 24, 1893, the instruction given and titles issued in this school are as follows: (Some of this instruction and some titles were also in existence in the schools of Iloilo and Pampanga. )

First group.-Elements of arithmetic and elementary geometry; plain drawing; work in the workshops of the school in the trade in which the apprentice has matriculated.

Second group. - Elements of physics; study of materials relating to the trade in which the student has matriculated; industrial drawing; work in the shops of the school relating to the trade in which the student has matriculated.

Third group.-Elements of mechanics; ornamental drawing; work in the workshops (third course).

General course for workmen and artisans, without reference to any particular trade:
Elements of arithmetic and geometry and their application to arts and trades; elements of physics and chemistry applied; elements of mechanics; study of materials; principles of construction; industrial geometrical drawing with instruments, and freehand; ornamental figure drawing and the use of color for ornamental purposes; modeling and carving; mercantile arithmetic; bookkeeping and commercial correspondence; French; English; final instruction in practical work for horseshoers, molders, founders, locksmiths, wheelwrights, cutters, boiler makers, carpenters, cabinetmakers, engravers, compositors, lithographers, masons, stonecutters, and potters.

MECHANICAL ENGINEERS.
First group. - Elements of arithmetic and applied geometry; industrial drawing of machines; setting-up shop; and work with a file.

Second group.-Elements of applied physics; industrial drawing; setting-up shop; work with a lathe.

Third group.-Elements of mechanics, comprising statics, cinematics, dynamics, and hydraulics; industrial drawing; and the making of plans of machines.

Fourth group.-Motor machines; management and care of machines; repairs; practical work in the setting up and mounting of machines; visits to industrial establishments.

## ELECTRICIANS

First group. -Elements of arithmetic and geometry; industrial drawing as applied to electrical machines; elementary work with file.

Second group. - Elements of applied physics and chemistry; applied industrial drawing; elementary work in carpentering.

Third group.-Practical electricity (first course); electrical units and measures;.. study of plans.

Fourth group.-Practical electricity (second course); industrial electrical motors; setting up electric plants; overhauling electrical plants.

MASTERS OF WORKs.
First group.-(1) Elements of arithmetic; (2) elements of geometry; lineal and topographical drawing; practical work in stonecutting and masonry.

Second group.-(1) Elements of plane trigonometry; (2) elements of descriptive geometry; (3) elements of topography; ornamental drawing; practical work in carpentering.

Third group.-(1) Elements of physics; (2) elements of static mechanics and study of the durability of materials; (3) study of materials; architectural drawing; practical work at the forge and in setting up machines.

Fourth group. - (1). Elements of stereotyping; (2) construction; (3) hygiene of construction; legislation on city property.

## mercantile peritos. 1

First group.-(1) Mercantile arithmetic; (2) descriptive geogiaphy; (3) French (first course).

Second group.-(1) Geography and commercial statistics; (2) accounts and bookkeeping; (3) English (first course); (4) French (second course).

Third group.-(1) Elements of political economy; (2) mercantile and industrial legislation; (3) practice in mercantile correspondence and operations; (4) English (second course).

The amount of service which this school could render may be judged by the following: In 1894, 2,833 scholars matriculated, and of these, out of 309 who were examined, 268 were passed. In the workshops 615 matriculated, and of these 76 were examined and 35 passed.

In said year one title of master workman, one of a skilled man in commerce, one of a mine foreman, and two of skilled mechanics were issued.

Regarding titles of men skilled in commerce and mechanics, we ought to say that they were also issued in the municipal atheneum and the University of Santo Tomás.

The title of mechanic was conferred after the study of the courses in mathematics, physics, French, and one in applied mechanics, without any practical experience, and it may be said that scholars left both centers of education with a purely nominal skill.

Regarding those holding titles of men skilled in commerce (peritos) we must do those from the municipal atheneum the justice to say that they were sufficiently expert, although they had no knowledge of languages, while the education of those from the university was very deficient.

The plan of instruction in this occupation was alike in all these centers of learning.
Nevertheless, from these two latter establishments about seven have graduated with the title of "peritos," and the same number with the title of slzilled mechanics.

## SCHOOL OF AGRICULTURE.

We must not confound this school with the agricultural society of the Philippines, an institution created November 15, 1881, and a dependency of the department of
general inspection of forests, especially as the separation of these two institutions was efiected in July, 1884.

The school of agriculture of Manila, the only one in the Philippines, was created by royal decree dated November 29, 1887, and its objects were, first, the necessary theoretical and practical education of skilled farmers. Second, education of overseers. Third, to promote, by means of observation, experiment, and investigation, the agricultural progress of the Philippines. In order to enter officially into the study of scientific agriculture it was necessary to be vouched for by a valid certificate, to be of good health, and to have studied and passed examinations in some establishment of the secondary education or other properly accredited establishments. The course of study was as follows:

FIRST YEAR.
Elements of agriculture; mathematical problems; practical work in topography; linear and topographical drawing.

## SECOND YEAR.

Special methods of cultivation; elements of stock breeding; agricultural arts; practical work in cultivation and the industries; setting up and management of machines; drawings applied to machines and to plants.

## THIRD YEAR.

Elements of rural economy; accounts and agricultural legislation; general practical work in cultivation, stock breeding, and industry; drawing of plans.
The education of overseers was carried on in the agricultural stations, also created at the same time as the school in Manila, for the purpose of doing technical work in analyses of earth, systems of irrigation, studies of seed, acclimatization of vegetables and animals, study and treatment of epizootic, epiphysis, etc.

There were agricultural stations in Isabela de Luzon, Ilocos, Albay, Cebu, Iloilo, Mindanao, Jolo, and Leyte. The last two were abolished by royal decrees dated, respectively, September 10, 1888, and December 7, 1891.

The professors in the school were agricultural engineers and their assistants skilled farmers. In the first term of this school, which was begun on July 7, 1887, as this branch of education was a new thing, 33 scholars matriculated in the course for skilled farmers and 22 in the course for overseers.
The University of Santo Tomás, both of itself and through the municipal atheneum, issued certificates to skilled farmers and surveyors, for which it required mathematics, physics, and chemistry, natural history, agriculture, topography, and linear and topographical drawing.

An equal number of skilled farmers graduated from each of these two institutions and from the school of agriculture simultaneously, and when the school was not in existence these institutions had a much greater attendance in these branches.

NAUTiCAL SCHOOL.
The profession of pilot of merchant marine is studied in this school. Theoretical instruction is given in the school and practical instruction in navigation.

The courses, which covered three years' study, were as follows: Theory and practice of arithmetic (first year); algebra, geometry, and plane trigonometry (second year) ; spherical trigonometry, cosmography, and pilotage (third year) ; topography and topographical and hydrographical drawing (third year).
The education acquired in this school was very good, for its staff of professors was excellent, the majority being Filipinos. From this school many pilots of the present merchant marine have graduated.

## SUPERIOR SCHOOL OF PAINTING, SCULPTURE, AND ENGRAVING.

The reorganization of this school (opened in 1850), formerly called the Academy of Drawing, dates from the year 1892, approximately.
From this school, in spite of the miserable artistic instruction given, young Filipinos have graduated greatly benefited, and some of them have won in competitive trials the prize of a scholarship and pension in Madrid, which the municipality of Manila gave every four years.
In the new organization this school was separated from the school of arts and
trades, their union being impossible, and assumed from that time the name by which it has been known since the year 1898. The courses taught were the following:

Principles of the figure, including the entire body, the antique, drapery, and the nude.

Color, composition.
Landscape, elemental from nature.
Water colors, from nature.
Sculpture.
Engraving on soft substances.
Engraving in intaglio.
Pictorial anatomy.
History and theory of fine art.
Perspective.
Drawing.
The professors were sufficiently capable persons, and some Filipinos were numbered among them.

Two hundred to three hundred youths attended this school.
SEMINARIES.
The seminaries which existed in the Philippines for the purpose of giving priestly education to the youths who desired to receive this catholic sacrament were the following:

San Carlos, in Manila, in charge of the Jesuit Fathers; that of the congregation of San Vicente de Paul; the Seminary of Cebu, in charge of the same; that of Nueva Caceres (Camarines), under the direction of the same; that of Jaro, under the same direction, and that of Bigan, in charge of the Augustinian Fathers.

All these seminaries were governed by priests, and all belonged to the secular clergy, and were supported by ecclesiastical funds.

These seminaries operated in two ways: They taught all the courses of the secondary education, and in order to take orders the scholars were taught the following courses more or less extensively, after having passed examinations in all of the courses of the secondary education: Metaphysics, moral theology, liturgy, rubrics, Gregorian chanting, dogmatic theology, and theological topics.

We have been given to understand that the last two courses were not obligatory in order to take orders.

It is without doubt due to this fact that the education of the Philippine priests could not congratulate itself upon any of its preceptors, but rather upon its own original spirit. Not much could be expected of it, considering the sad future of the Philippine priests and that the finished education of their future rivals did not suit the Spanish friars. It is certain that, with some very honorable exceptions, Philippine priests have not reached in their ministry the same grade of perfection which their compatriots have reached in other careers.

As it is our intention to talk only of education, we refer the reader to one of the many works which have been written on this much-debated matter for information on this subject.

The number of scholars in the seminaries of Manila amounted to 60 or 80, and there were a great many more in the provinces.

## MILITARY ACADEMY.

The object of this academy, which has now been in existence a long time, was to allow sons of military men resident in the colonies to enter the militia, and to enable soldiers and noncommissioned officers of the army to become officers.

To attain this end great influence was necessary for a son of a native-and generally sons of natives had to enlist as soldiers, more especially since the age limit has been lowered.

Formerly, when the scale of ages was different in the colonies from the scale in Spain, officers graduated from this academy, but afterwards when the scales were made uniform this academy was closed, and opened again later under different conditions.

The scholars who finally graduated from this academy were entered in the general military academy of Spain, in Toledo, which annually gave notice to the academy of Manila of the number of scholars which it could accommodate.

This highly liberal conduct which Spain has observed in this colony in spite of the revolutions which she has had to put down here has been duly responded to by the Philippine military men who have sworn fidelity to Spain, and a good proof of this is the increased number of military Filipinos who have gone to the Peninsula.

The courses which were taught in the academy, for those who had formerly been examined in any college in Spain in geography and history, were:

Arithmetic and algebra, geometry and trigonometry, French, lineal and topographical drawing.

The faculty of the academy was very able, being formed from officers and chieis of learned bodies, and those who graduated had been properly educated.

Examinations were comparatively strict, although influence also was used in favor of some.
About a hundred youths, more or less, attended this academy each year.
After having read this memorial, even an unobservant mind may acquire an approximate idea of the state of education in the Philippines when they became subject to America. By reading this memorial the deficiencies of education may be appreciated, its irregularity comprehended, and its thousand anomalies observed.

In 1888 the total amount expended for education in the islands, exclusive of schools of agriculture, was $\$ 124,963.70$ (Mexican). Of this amount, $\$ 86,450$ was expended in Manila alone, leaving but $\$ 38,513.70$ for all the provinces. On the schools of agriculture and the experiment stations $\$ 113,686.64$ was expended, giving a grand total of $\$ 238,650.34$. In 1894 the grand total was $\$ 404,731.50$. It is not known how this amount was distributed, but it is probably safe to assume that the proportions were about as in 1888.

## primary education.

Primary education or instruction, which is the first instruction that a child receives as soon as it attains the age of reason, is conducted in the Philippines by schoolmasters, teachers of both sexes, from the normal and superior school, except in Intremuras, where it is administered by Jesuit fathers and Sisters of Charity. The number of primary schools in the whole archipelago, according to the statistics of the year 1896, is 2,167 for both sexes, there being two schools for each sex in every town of 5,000 inhabitants, three for each sex in towns of 10,000 inhabitants, and so on, the number of schools increasing in the ratio of one schoolmaster and one schoolmistress for each 5,000 inhabitants.
The schools were classified according to the importance of the towns in the following manner, the corresponding salary being given:

| sters: | Per month. | Mistresses: | Per month |
| :---: | :---: | :---: | :---: |
| Highest grade (first class) | \$40 | Highest grade (first class) | \$25 |
| Highest grade (second class) | )...- 30 | Highest grade (second clas | - 20 |
| Intermediate grade |  | Intermediate grade | 15 |
| Lowest grade | 20 | Lowest grade |  |
| Assistants | 15 | Assistants | . 10 |

There was competition for the position of teacher of the highest grade, both first and second class. The positions in the lowest and intermediate grades were filled by means of competitive examinations between holders of teachers' titles. Assistants, in default of others, might be persons not holding titles.

The governor of each province was the inspector-general of all the schools in his province.
The local inspector, or "nato," was formerly the friar who was priest of the town; and, although in the municipal reform of Minister Maura it was provided that the municipal captain should be local inspector of schools, we have understood that this provision was not carried out, and that the parish priest has remained in his office of inspector. From this we may judge the sort of instruction that school masters and mistresses were forced to give.
The courses taught in these schools are found in a set of regulations devoted to "elements of pedagogism," a text-book in the normal schools for male and female school-teachers published in Manila in 1890.
This set of regulations, approved by the Government of His Majesty, contains the following:
"Arr. 1. Instruction in schools for natives shall be reduced for the present to elementary primary instruction, and shall consist of Christian doctrine and principles of morality and sacred history suitable for children; (2) reading; (3) writing; (4) practical instruction in Spanish, Spanish grammar, and orthography; (5) principles of arithmetic, comprising the four rules for figures, common fractions, decimals, and instruction in the decimal metric system and its equivalents in ordinary weights and measures; (6) instruction in general geography and Spanish history; (7) instruction in practical agriculture as applied to the products of the country; (8) rules of deportment; (9) vocal music."

Primary education of girls shall comprise the subjects mentioned in numbers 1, 2, $3,4,5,8$, and 9 of this article, and instruction in employments suitable to their sex.

Regarding the instruction in Spanish, it must be said that it was purely imaginary, because the local inspectors, the parish priests, prohibited it for the children, especially in those towns in which, on account of their remote situation, the governor rarely intervened. The instruction in geography was so superficial that there was not a single child who was given any real knowledge on this subject, which was due, principally, to the very bad method of instruction adopted, in which a geographical chart was rarely seen, and everything was left to memory.

The only history taught was that of Spain, and that under conventional censorship. The history of the rest of the world was, of course, unknown.

The course in vocal music was only a pretense, for it was not taught. This plan did not include gymnastic exercise nor any physical exercise, which gives an idea of the sort of education which was given in the Philippines.

The second article of the same set of regulations reads as follows:
"Art. 2. Primary instruction is obligatory for all natives. The fathers, tutors, or guardians of children shall send them to the public schools between the ages of 10 and 12 years, unless they prove that they give them sufficient instruction in their homes or in private schools. Those who do not obey this rule shall be admonished and compelled to do so by the authorities by a fine of from one-half real to 2 reals, when there is a school in the town at such distance that the children can conveniently attend. The fathers and guardians of children may also send them to the schools between the ages of 6 and 14 years."
This article appears to be based upon the wisest principles, but it was very far from being carried out, for this branch of administration, or to put it better, of police, was more neglected in towns than anything else, and there were cases in which schools had scarcely a dozen scholars.

The municipal school for boys, and in particular the municipal atheneum, although it also suffered from the defects mentioned, may be mentioned as better equipped schools. In this class the schools for girls are much more numerous than the schools for boys. In Manila are the normal schools for schoolmistresses, of which we shall speak hereafter, in charge of the Ascensionist Nuns; the School of Santa Isabel, in charge of the Sisters of Charity; the Concordia School; the Santa Rosa and Lo Oban schools, also in charge of the Sisters of Charity, which gave the same grade of instruction. In Jaro and Cebu these sisters have other schools similarly organized.

The Dominican Sisters have their college of Santa Catelina in Manila, and others in Lingayen, Bigan, and Tuguegararo, like the others but more strictly devoted to religious instruction. In all of these, privacy like that of the cloister prevails and scholars go out on the street at certain times. To all of this it must be added that these colleges possess none of the hygienic conditions exacted from every college, with the exception of the Concordia and some in the provinces.

In regard to private primary schools, there are many, especially in the capital, which are not carried on strictly according to law, and from which excessive abuses arise, but in such cases the school is sufficiently punished by the bad reputation which it acquires.

The colleges for girls in Manila, under the charge of women who are strict members of a religious order, were originally founded for charitable purposes, and some of them date from the early part of the seventeenth century (the Colegio de Santa Isabel was founded in 1632). They are supported partly by the funds of the charitable societies to which they belong and partly from the income of lands belonging to them. The instruction in one of them is given as reading, writing, arithmetic, Christian doctrine, and subjects useful for women to know-plain and ornamental needlework, etc. Isabelo de los Reyes gives a long list of the subjects taught and complains that they are the same as those taught in Europe, with no reference to the needs of the Philippines. Young women who are to be of assistance to their husbands, he says, should be taught something practical, such as parts of agriculture and business.
The United States military governor of the Philippines, under date of April 20, 1900, directed that reports be sent from each military district to the officer in charge of public school instruction, showing, among other things, how many schools were established in the districts. From these reports it appears that many schools were in operation in that year, not withstanding the disturbed conditions. Thus, Gen. S. B. M. Young reported that 203 schools were in operation in the first district of northern Luzon, with 10,714 children in attendance, and that 25,000 children would probably attend if good schools were established. There were 44,716 children of school age.

The majority of the towns had school buildings, public or private. In some towns great interest was felt in the schools, in others very little. The president of one town thought he could raise 19,000 pesos by voluntary contribution to erect school buildings and equip them. Most towns, however, were too poor to contribute much. Government aid would be needed. The language used in the schools in northwest Iuzou was Spanish or Ilocano, Tagalog not being in use. In the third district there were 280 schools in existence, with 234 to be established. The officers recommend teaching only in English in order to cause that language to supersede the native tongue. In the third district the public school buildings were inadequate. Many teachers knew no language but their own. In the reports from individual pueblos we observe that Spanish was taught in the towns themselves, while in the suburban districts (barrios) the native language alone was used in teaching reading, writing, arithmetic, and the catechism. One officer recommends retaining the instruction in morals, which is a feature of instruction in all Spanish schools. Other districts were very deficient; e. g., the second district, southern Luzon, where there were 22 schools, and 232 were required. "It would be risky to send the English instructors (if Americans) now into the barrios where our arms could not protect them," continues the report-a statement which shows the unfavorable conditions of the district, and might well account for the scarcity of schools. There were schoolhouses in nearly every town of that district. In the report on the third district, Department of Southern Luzon, Brigadier-General Bell recommends that a land tax be established, "so that the rich landowners who now, under the present system, pay practically nothing, shall be made to bear their share of the burden of educating the children." In that district "all native teachers can be supplied from native talent, but English teachers who understand a little Spanish are urgently needed and in demand." The schoolhouses were "generally occupied without regard to light, convenience, or sanitation. The great personal cleanliness of the people alone renders them habitable." This was among the Bicols.

In eight towns on the island of Cebu about 3,000 children were attending school, thought to be one-fifth of the total number of school age. In all the towns there were two schools, except in Cebu itself, where there were seven, besides a seminary and college for young men.

On the island of Negros 59 pueblos had schools. On Panay there were 210 schools, with an attendance of 10,803 pupils out of a school population of 24,361 .

Evell in Mindanao there were 175 schools under the Jesuits. The teachers were graduates of the normal school at Manila.

The foregoing extracts from the reports of the military officers show that the public elementary school system required by Spanish law, whatever its defects, was widely diffused over the archipelago when the Americans arrived. The schools were temporarily placed in charge of the American military authorities. The appointment of Mr. F. W. Atkinson to be superintendent of public instruction in the Philippines marks the change from the military to the civil control of the schools, as his appointment was made under the civil commission appointed by the President to form a civil administration in the islands. Mr. Atkinson entered upon his duties September 1, 1900.

The following act, passed by the United States Philippine Commission, affords the latest information upon education in the archipelago:
AN ACI establishing a department of publie instruction in the Philippine Islands, and appropriating forty thousand dollars $(\$ 10,000)$ for the organization and maintenance of a normal and a trade school in Mranila, and fifteen thousand dollars ( $\$ 15,000$ ) for the organization and maintenance of an agmeultural school in the island of Negros for the year 1901.
By auihority of the President of the United States, be it enacted by the United Siates Philippine Commission, that:
Section 1. A department of public instruction for the Philippine Islands is hereby established, the central office of which shall be in the city of Manila. All primary instruction in the schools established or maintained under this act shall be free.

Sec. 2. All schools heretofore established in the Philippine Islands under the auspices of the military government are hereby declared to be in the department of public instruction established by section 1, and are made subject to the control of the officers of this department.

Sec. 3. The chief officer of this department shall be denominated the general superintendent of public instruction, and shall be appointed by the commission. His annual salary shall be six thousand dollars ( $\$ 6,000$ ). He shall have the following powers and duties, to be exercised and discharged under the general supervision of the military governor :
(a) He shall establish schools in every pueblo in the archipelago where practicable, and shall reorganize those already established, where such reorganization is necessary.
(b) He shall appoint, in accordance with act No. 25, enacted October 17, 1900, a city superintendent of schools for Manila, and division superintendents of schools for other parts of the archipelago, and the teachers and clerks authorized by law, and shall prescribe the duties of such teachers and clerks.
(c) He shall fix the salaries of the division superintendents and teachers within the limits established by law.
(d) He shall fix a curriculum for primary, secondary, and other public schools, and shall decide in what towns secondary schools shall be established.
(e) He shall divide the archipelago into school divisions, not more than ten (10) in number, and shall fix the boundaries thereof, with power to change the same when necessary, but the city of Manila and its barrios shall constitute one of such school divisions.
(f) He shall prescribe the authority to be exercised by the principal teacher of each school over the other teachers, if any, and his duties in caring for the schoolhouse and school property.
(g) He shall prescribe plans for the construction of schoolhouses to be built by the municipalities, the amount of land required in each case, and rules of hygiene which shall ba observed in connection with the schools of the archipelago.
( $h$ ) He shall make contracts for the purchase of school supplies authorized by law, and, whenever practicable, he shall invite bids by public advertisement and shall award the contract to the lowest responsible bidder.
(i) He shall have power to determine the towns in which English teachers, to be paid out of the insular treasury, shall teach. He may exercise this discretion in favor of those towns showing their loyalty to the United States by their peaceful condition, and in favor of those towns which shall construct and maintain suitable schoolhouses by local taxation or contributions.
(j) In case of a vacancy in the office of a division superintendent or that of the superintendent for Manila, he shall discharge all the duties of such position during the vacancy, or may make a temporary appointment to fill the same.
(k) He shall examine and pass upon all requisitions made for funds by division superintendents and forward them, with his recommendation, to the chief executive for submission to the commission.
( $l$ ) On or before January first and July first of each year he shall make a report of his administration for the previous six months to the military governor and to the commission and such special reports as may from time to time be called for by either. In the regular semiannual reports it shall be the duty of the superintendent to recommend changes in the school law which he deems expedient.
( $m$ ) He shail exercise general supervision over the entire department, and shall prepare and promulgate rules for the examination and determination of the qualifications of applicants for positions of division superintendents and teachers and for the guidance of the officers and teachers of the department adapted to carry out this law and not inconsistent with its provisions.

SEc. 4. There shall be a superior advisory board of education, composed of the general superintendent and four members, to be appointed by the commission. It shall be the duty of the board to hold regular meetings once in two months on a day to be fixed by resolution of the board, and such special meetings as shall be called by the general superintendent. The general superintendent shall act as president of the board. The chief clerk of the general superintendent shall act as secretary of the board and keep minutes of its proceedings. It shall be the duty of the board to assist the general superintendent, by advice and information concerning the educational needs and condition of the islands, to make such investigations as the general superintendent may desire, and to make recommendations to the commission from time to time as to needed amendments to the law. Each of the four members of the board, appointed by virtue of this section, shall receive as compensation ten dollars for each regular or special meeting which he shall attend. Any member of the board who is a nonresident of Manila shall be paid his actual and necessary expenses for travel
from his residence to Manila and his return and hotel expenses. Requisitions for the amount required to pay such compensation and expenses shall be made by the general superintendent. The terms of office of the members of such board appointed under this section shall be for three years, or until their successors are appointed and qualified.
Sec. 5. There shall be a city superintendent of schools in the city of Manila, who shall receive an annual salary of three thousand dollars ( $\$ 3,000$ ).
Sec. 6. In each school division established by the general superintendent of public instruction there shall be a division superintendent, who shall receive an annual salary of not less than two thousand dollars $(\$ 2,000)$ and not more than twenty-five hundred dollars ( $\$ 2,500$ ).
Sec. 7. The actual expenses of the general superintendent and the division superintendents while traveling or absent from their usual places of residence on official business shall be paid out of the insular treasury.
Sec. 8. Except where otherwise provided, provisions of this act describing the duties and powers of division superintendents shall apply to the city superintendent for Manila.

SEc. 9. Each division superintendent shall, subject to rules prescribed by the general superintendent under section $3(m)$, appoint the native school-teachers to serve in the schools within his district and shall fix their salaries from year to year within the limits prescribed by law. He shall examine the schoolhouses occupied for public instruction within his division with a view to determining their suitableness and hygienic condition. Should the schoolhouse in which any school is conducted appear to the division superintendent to be unsuitable and dangerous for the health of the chidren, and should no other schoolhouse be available, he shall have power, subject to the approval of the general superintendent, to discontinue such school, and it shall be unlawful thereafter to use the schoolhouse thus condemned for public school purposes. He shall pass upon and accept or reject or modify the plans for any new schoolhouse proposed by the local authorities to be erected and for the proposed site thereof, and shall make report of his action thereon to the general superintendent of public instruction. If the local authorities or the local school board shall be dissatisfied with the decision of the division superintendent as to the suitableness of the plans or site of the proposed schoolhouse, they may appeal to the general superintendent, whose decision shall be final. He shall make careful investigations into the agricultural conditions existing in his division and shall make report thereon to the general superintendent of public instruction, with a view to aiding the general superintendent in making recommendations as to the places and number of the agricultural schools hereafter to be established. He shall see to it by personal visits and by requiring reports from the principal teachers of each school that the curriculum for primary and secondary schools prescribed by the general superintendent of public instruction is complied with. He shall make himself familiar with the supplies and text-books needed in each school in his division, and shall make report of the same at as early a date as possible, in order that they may be contracted for and furnished by the general superintendent. He shall appoint one-half of the local school board in each pueblo in his division, as provided in section 10. He shall have and maintain his residence and an office in one of the large towns in his division, from which all the pueblos in his district can be most conveniently reached.
Sec. 10. There shall be established in each municipality organized under any general order of the military governor or under such municipal code as may be hereafter enacted, a local school board, consisting of four or six members, as the division superintendent may determine, in addition to the president or alcalde of the municipality, who shall be a member ex officio. One-half of the members, except the member ex officio, shall be elected by the municipal council, and the remaining half shall be appointed by the division superintendent, and the term of office of all members, holding by appointment or election, shall be two years and until their successors shall have been duly elected or appointed.
SEc. 11. The appointed or elected members of the local school board may, after due notice and hearing, be removed at any time by the division superintendent, subject to the approval of the general superintendent of public instruction, who shall have power to suspend such members temporarily.
Sec. 12. It shall be the power and duty of the local school board:
(a) To visit from time to time the schools of the pueblo and to report bimonthly to the division superintendent their condition and the attendance of pupils;
(b) To recommend sites and plans to the municipal council for school houses to be erected;
(c) Where there are two or more schools in the pueb' to adopt rules, subject to
the supervision of the division superintendent, for assigning the pupils of the pueblo to the several schools;
(d) To report annually to the municipal council the amount of money which should be raised for the current year by local taxation for school purposes;
(e) To report, whenever it shall deem necessary, directly to the general superintendent as to the condition of the schools of the pueblo and to make suggestions in respect thereto as may seem to it expedient.
Sec. 13. Eyery pueblo shall constitute a school district, and it shall be the duty of the municipal council thereof to make as ample provision as possible by local taxation for the support of all the schools established within its jurisdiction. In exceptional cases, where the topography of the country or the difficulty of communication between parts of the same pueblo require it, the division superintendent may attach a part of one pueblo to the school district of another and shall, in such case, fix the amount which it will be just for the municipal council of the former to contribute to the annual school expense of the latter.
Sec. 14. The English language shall, as soon as practicable, be made the basis of all public school instruction, and soldiers may be detailed as instructors until such time as they may be replaced by trained teachers.

Sec. 15. Authority is hereby given to the general superintendent of public instruction to obtain from the United States one thousand trained teachers at monthly salaries of not less than seventy-five doilars ( $\$ 75$ ) and not more than one hundred and twenty-five dollars ( $\$ 125$ ), the exact salary of each teacher to be fixed by the general superintendent of public instruction in accordance with the efficiency of the teacher in question and the importance of the position held. The necessary traveling expenses of such teachers from their places of residence to Manila shall be paid by the government.
Sec. 16. No teacher or other person shall teach or criticise the doctrines of any church, religious sect, or denomination, or shall attempt to influence the pupils for or against any church or religious sect in any public school established under this act. If any teacher shall intentionally violate this section, he or she shall, after due hearing, be dismissed from the public service: Provided, however, That it shall be lawful for the priest or minister of any church established in the pueblo where a public school is situated, either in person or by a designated teacher of religion, to teach religion for one-half an hour three times a week in the school building to those public-school pupils whose parents or guardians desire it and express their desire therefor in writing filed with the principal teacher of the school, to be forwarded to the division superintendent, who shall fix the hours and rooms for such teaching. But no public school teacher shall either conduct religious exercises or teach religion or act as a designated religious teacher in the school building under the foregoing authority, and no pupil shall be required by any public school teacher to attend and receive the religious instruction herein permitted. Should the opportunity thus given to teach religion be used by the priest, minister, or religious teacher for the purpose of arousing disloyalty to the United States, or of discouraging the attendance of pupils at such public school, of creating a disturbance of public order, or of interfering with the discipline of the school, the division superintendent, subject to the approval of the general superintendent of public instruction, may, after due investigation and hearing, forbid such offending priest, minister, or religious teacher from entering the public school building thereafter.
Sec. 17. There shall be established and maintained in the city of Manila a normal school for the education of natives of the islands in the science of teaching. The rules and plan for the organization and conduct of such school and the qualifications. of pupils entering the same shall be determined by the general superintendent of public instruction.
Sec. 18. There shall be established and maintained in the city of Manila a trade school for the instruction of natives of the islands in the useful trades. The powers and duties of the general superintendent in respect to this school shall be the same as those provided in the section in respect to the normal school.
Sec. 19. There shall be established and maintained a school of agriculture in the island of Negros. The superior advisory school board shall recommend to the commission for final determination a proper site for such school. The powers and duties of the general superintendent in respect to this school shall be the same as those provided in the section concerning the normal school.
SEc. 20. The general superintendent of public instruction is authorized and directed, under the supervision of the military governor, to procure the making of plans and estimates for the creation of such school buildings as he may deem necessary and
practicable at the present time, including a building or buildings for the normal school in Manila and a building or buildings for the trade school directed to be established in sections 17 and 18 hereof. The estimated cost of such buildings and their proper equipment shall not exceed four hundred thousand dollars ( $\$ 400,000$ ).
Such plans and estimates shall be submitted to the commission.
Sec. 21. The general superintendent of public instruction is directed to prepare and submit to the commission, through the military governor, a statement showing the text-books and other supplies which will be needed for the year 1901, the estimated cost of which shall not exceed the sum of two hundred and twenty thousand dollars ( $\$ 220,000$ ).

Sec. 22. The sum of twenty-five thousand dollars $(\$ 25,000)$ or so much thereof as may be necessary is hereby appropriated out of any funds in the insular treasury not otherwise appropriated for the organization and maintenance of the normal school in Manila for the year 1901.

Sec. 23. The sum of fifteen thousand dollars ( $\$ 15,000$ ), or so much thereof as may be necessary, is hereby appropriated out of any funds in the insular treasury not otherwise appropriated, for the organization and maintenance of the trade school in Manila for the year 1901.

Sec. 24. The sum of fifteen thousand dollars ( $\$ 15,000$ ), or so much thereof as may be necessary, is hereby appropriated, out of any funds in theinsular treasury not otherwise appropriated, for the organization and maintenance of the school of agriculture for the year 1901.
Sec. 25 . Nothing in this act shall be construed in any way to forbid, impede, or obstruct the establishment and maintenance of private schools.

Sec. 26. Whenever sums of money are mentioned in this act, they shall be understood to be money of the United States.

Sec. 27. This act shall take effect on its passage.
Enacted January 21, 1901.

## APPENDIX I.

The following is a partial bibliography of works and articles in special journals relating to the Philippines, and was, for the most part, selected from the cards in the Library of Congress, which have been prepared under the supervision of Mr. A. P.C. Griffin. The titles were selected mainly with a view to illustrate the scope of the information relating to the Philippines which has been current in Europe, especially in recent years, and to show the variety of intellectual activity in the archipelago itself; therefore only a very few works published before the nineteenth century have been included in the list. Many of the books and articles were consulted in preparing the preceding summary.
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## APPENDIX II.

TAGALOG ALPHABET USED BY FR. FRANCISCO LOPEZ, 1621.
The following alphabet was used by Fr. Francisco Lopez in a catechism printed in 1621. Fr. Lopez improved the original Tagalog alphabet by introducing the sign $\dagger$ underneath the alphabetical sign in order to make the latter a simple consonant iike the equivalent letter in Spanish. The alphabet is taken from a work by the R. P. Fr. Cipriano Marcilla y Martin, entitled Estudio de los Antiguas Alfabetos Filipinos, published in Malabon, Luzon, 1895. The conclusion of the author is that all the Filipino alphabets were imitations or adaptations of the Tagalog.
The vowels have the continental sound. The point placed above or below the letter gives the vowel sound as shown.


The following comparative table of alphabets was prepared by the Filipino author Isabelo de los Reyes y Florentino.
Nos. 1 and 2 are Filipino alphabets (Visayas); 3 and 4 are Malay (Sumatra and Celebes); 5 is Indian (Asoka); 6 is from Borneo, while 7 is ancient Javanese.


CUBA.
As soon as the Americans had taken possession of the island the American military governor assumed, in regard to education, the functions of the Spanish GovernorGeneral, who had represented the King of Spain. The details of the system of education, even to the minutest particulars, were directed by orders from the American military governor as they had been previously by royal decrees. Under American rule some radical changes have been made in the organization of the elementary school system in order to make it more like that of the common schools of the United States, and the schools were placed under a superintendent. The courses of study in the secondary schools (the institutes in the different provinces), the special and art schools of Habana, and the university are still arranged by printed orders from the military governor, the changes being made upon the recommendation of the secretary of public instruction. Professors were also appointed by the military governor until by the order of February 7, 1900, it was directed that the assistant professors should be appointed by the secretary of public instruction upon the recommendation of the faculties. The new programme of the school of commerce in the Institute of Habana shows that increased attention is being given to commercial studies, and a school of stenography and typewriting has also been established in that institute. The new programme of the faculty of pharmacy at the University of Habana shows that increased attention is being given to practical studies in the university also. The course in physics and other experimental or laboratory studies has been extended. From an interesting address by Dr. Carlos de Pedroso, of the Institute of Habana, before the Harvard Teachers' Association, we learn that the principal needs of the institutes are laboratories, museums, and apparatus for practical work in experimental sciences.

The changes which have been made in the elementary school system since the American occupation may be seen from a comparison of the condition of affairs in the island before that event, as described in the following account taken from the census of Cuba, published by the War Department, and the recent condition as shown by the statistics and enactments, which are given next in order:

[^78]said at once that the plan of studies as thus prescribed was excellent in theory, and had it been thoroughly carricd out by mcans of liberal appropriations and more attention to details, the figures of the census would have been reversed as far as they represent the condition of literacy in general. But, as will be shown later in this report, the appropriations for the schools were far from adequate, and their administration most imperfect, and thus the scheme of popular education, which as a theorctical proposition was almost beyond adverse criticism, utterly failed to accomplish its ostensible purpose, as the figures of the census prove.

Under the law of 1880 the general supervision of public instruction in all its branches was vested in the governor-general and administered by him through the superior board of public instruction, composed of a vice-president and twelve other members appointcd by the home government on the recommendation of the governor-general, who was ex officio president of the board. * * *

In addition to the superior board of education there was a board of education in each province, performing its duties under the supervision of the provincial governor and the provincial deputation.

The provincial board was composed of the governor of the province, an ecclesiastic to represent the diocese, and nine others. * * *

The local or municipal boards of cducation consisted of the mayor as president, one alderman, the parish priest, and three fathers of families. In towns of more than 1,000 inhabitants the number of members could be increased on the recommendation of the mayor by adding more heads of families.

For the periodical examination of the schools and other educationalsinstitutions the law provided inspectors, who were certain members of the superior board of cducation. Other inspectors were ecclesiastics designated by the church to examine the text-books and instruction of the professors, in order to determine whether anything prejudicial to Catholic doctrine was incorporated in the religious cducation of the pupils.

Primary instruction was divided into the clementary and supcrior. The complete course of instruction included Christian doctrine and the outlines of sacred history arranged for children; reading, writing, and the clements of Spanish grammar, with exercises in spelling; principles of arithmetic, with the legal system of weights, measures, and money; bricf outline of agriculture, industry, and commerce, according to localities, and the constitution of the state.

Elementary instruction not embracing all the subjects just mentioned was considered incomplete, and the elementary schools were called " complete," or "incomplete," according to the instruction given.

Primary superior instruction embraced, in addition to a reasonable extension of the subjects mentioned as elementary, the principles of geometry, lineal drawing, and as applied to the elements of surveying; the rudiments of history and geography, espccially of Spain, and the elements of physics and natural history. In the elementary instruction of girls, sewing, embroidcry, and drawing as applicd to same, and the elements of domestic hygiene were substituted for agriculture, industry, and commerce, and the elementary superior course was omitted.

The law further required the elementary education of the deaf, dumb, and blind in the institutions established for them. All Spanish children between the ages of 6 and 9 were required to receive elementary instruction in the public primary schools unless their parents or guardians provided such instruction at home or in private schools, the fine for failing to do so being from 2 to 20 reales.

All elementary instruction was given free to children whose parents were not able to pay for it, and instruction in Christian religion and sacred history was subject to the supervision of the parish priest, who was required to visit the schools oncc each week for this purpose. * * *

As to the distribution of the primary schools throughout the municipalities, the law required every town of 500 souls to maintain at least one elementary school for boys, and another, although, perhaps, incomplete, for girls. Incomplete schools for the boys were only allowed in the smaller towns. In towns of 2,000 inhabitants two complete schools for boys and two for girls were required ; in towns of 4,000 , three, and so on, the number of schools increasing by one for each sex for every 2,000 inhabitants, including private schools, one-third of all schools, however, to be public.

The superior schools were established in the capitals of the provinces, and one in each town of 10,000 inhabitants, but the municipal authorities (council) could establish superior schools in towns of less population if thought advisable, provided it could be done without detriment to the maintenance of the required number of elementary schools.

The law further required the governor-general to provide infant schools (kindergartens) and night and Sunday schools, in which linear and ornamental drawing were to be taught, in the capitals of provinces and in towns of 10,000 inhabitants, and to promote the education of the deaf, dumb, and blind by providing at least one school for them in Habana, and a normal school for the education of teachers in the capital of each province.

Next in the regular course of public education was "secondary instruction," given in the institutes (institutos), of which there was one in each province, maintained by provincial funds and under the immediate supervision of the provincial deputations, througll which the appropriations were paid.

Secondary instruction embraced a course of five years and comprised general studies or a special course of scientific studies. The course of general studies included a daily lesson in Spanish or Latin grammar, the elements of rhetoric and poetry, one lesson daily; outlines of geography, three lessons
weekly; outlines of universal history, three lessons weekly; history of Srain, three lessons weekly; arithmetic and algebra, daily; geometry and plane trigonometry, daily; elements of physics and chemistry, daily; outlines of natural history, three lessons weekly; psychology, logic, and moral philosophy, daily; physiology and hygiene, three lessons weekly; and elements of agriculture every alternate day. For admission to the course it was necessary to pass an examination in the complete course of primary elementary instruction.
The special studies of the institutes or "secondary instruction" were linear, topographic, ornamental, and figure drawing; outlines of theoretical and praetical agriculture; industrial mechanics and chemistry as applied to the arts; topography, measures of area, and construction of plans; commercial arithmetic and bookkeeping; accounts and correspondence, and commercial transactions; outlines of political economy, commercial and industrial legislation, physical geography and commercial statistics; English, German, and Italian languages, and shorthand. * * *
On completing the course of general studies, pupils reeeived the degree of A. B. and were eligible to the University of Habana. Those who had followed the scientific course were eligible to certificates as surveyors (when 20 years old), and mechanical or ehemical experts, according to their proficieney in the special studies provided.
A pupil could take the general and scientific studies simultaneously if desired, and reeeive the instruction in languages and drawing at home.
Following. the course in the institutes eame the University of Habana, whose curriculum embraced law, medicine and pharmacy, philosophy and belles-lettres, and the exact sciences. For the higher education of engineers of roads, canals, and ports, mining and civil engineers, the industrial arts, belles-lettres, and diplomacy, the special schools of Spain were open.
The law also provided for a school of sculpture, painting, and engraving in Habana; one for the education of notaries, and, whenever thought advisable, an industrial college, a veterinary school, a commereial college, a nautical school, and one for master workmen, overseers, and surveyors. Of these special schools only the art school, the professional school, the normal school, and the school of arts and trades were carried on. In addition to the public sehools the law authorized all Spaniards to establish private schools, the government reserving the right to inspect their moral and hygienic condition and to direct sueh remedies as might be necessary to correct existing defects.
There were, as a result of this privilege, a large number of private primary elementary schools, and a number of colleges, which, as they conformed to certain provisions of the law, were incorporated with the provincial institutes for whieh they prepared their pupils. Some of these colleges were most excellent institutions, where boys could qualify for the university, besides being carefully trained in other ways. Such were the Jesuit College of Belen, established in Habana in 1853; the Colegios de Escuelas Pias, in Guanabacoa and Puerto Principe, and the Catholic Institute of Santiago, although, with the exception of the latter, they are not now able to confer the degree of A. B. In short, they are on the same footing as other colleges and merely prepare pupils for the institutes.
Forty other colleges were in operation when the census was taken. * * *
While the laws made ample provision for the free edueation of the mass of children, the number of schools and their administration were so deficient, through failure to provide even the funds voted in the municipal, provincial, and insular budgets, that only a small fraction of the children of school age were provided for. By the census it appears that only about one-sixth attended school during 1899, and only two-thirds of these went to the public schools.
The ten years' war was a serious interruption to the schools, and during the last war they were all closed by Captain-General Weyler, exeept in the provincial capitals and garrisoned towns occupied as military headquarters. Even many of these schools were slimly attended or abandoned by the teachers, who, as they received no pay, were unable to maintain themselves or their schools.
In February, 1898, the secretary of public instruetion of the autonomous government rescinded the decree of General Weyler and ordered the reestablishment of the schools, but they remained very much in the condition they then were until nearly a year after the American occupation. * * *
While the law required the compulsory attendance of children between 9 and 13 years of age at either public or private schools, it was not enforced, nor could it be, as the number of schools was totally insufficient. Again, while provision was made for secondary and university education, the fees for instruction and matriculation were so great that only the sons of parents or guardians able to pay ever passed beyond the elementary course of study, and many of those who qualified in the institutes werc unable to enter the university because unable to pay for their diplomas.
Although the teachers were supposed to be appointed after competitive examination, it was well understood that their selection was usually a personal or political question, to be decided without much reference to other qualifications. They were classified according to their salaries, and were also known as regular, temporary, or substitutes. As they were generally obliged to provide the schoolrooms, the schools were usually held in their homes, very few municipalities owning school buildings. Of school furniture, such as desks, books, slates, blackboards, maps, etc., there were frequently none, and the pupils, without respect to race, blacks and whites mixed, sat on benches with no backs for five or six hours consecutively, the instruction being ustally given simultaneously to the elasses, study and recitation being exceptional and impracticable. But a single teacher was allowed the elementary schools, no matter how many pupils, although the superior elementary schools were sometimes provided with assistants.

The schools for girls were separated from those for boys, and were invariably in charge of women. The schoolrooms were badly ventilated, with insufficient and foul privies, and no playgrounds. Physical culture was not taught. That the children learned as much as they did under such conditions was apparently due to their precocity and docility, traits which appear to be common to them throughout the island.

On December 6, 1899, the American military governor published an order reorganizing the elementary and secondary school system of the island. It provided that there should be a board of education in each municipality to take charge of the schools, with the mayor as president, who should appoint the other members; that there should be one public school for boys and one for girls in every town of 500 inhabitants, and more as the population is larger. In smaller towns "incomplete" schools were provided. It made attendance compulsory under penalty of a fine of $\$ 5$ to $\$ 25$; provided for the payment of the teachers, for superintendence and inspection of the schools, free text-books, and other details. The course of study was prescribed by the superintendent of schools.

On March 1, 1900, there were 3,099 schools (or schoolrooms) in operation with 3,500 teachers and 130,000 children enrolled. In 1899 there had been only 200 schools with an attendance of 4,000 . This enormous increase was said to be due to impressing upon the mayors of the municipalities the necessity of elementary schools, and assuring them that the United States Government would pay the salaries of the teachers. The expenditures up to the end of March, 1900, had been $\$ 3,500,000$, the school fund being taken from the customs receipts, and the estimate for 1900 was $\$ 4,000,000$.

The most comprehensive regulations regarding the public schools are the following, and the extracts taken show the organization of the entire school system of the island.

> Headquarters Division of CuBa, Habana, June 30, 1900.

The military governor of Cuba, upon the recommendation of the secretary of public instruction, directs the publication of the following regulations for the public schools of the island of cuba:

## COMMISSIONER OF PUBLIC SCHOOLS.

Commissioner the chief executive officer.-There shall be a chief executive officer for the public schools of the island, to be appointed by the military governor and to be known as the commissioner of public schools, and in the performance of his duties as such he shall be guided by this order, and by such rules and orders as may be promulgated hereafter by the military governor or the secretary of public instruction.

Duties of commissioner. - It shall be the duty of the commissioner of public schools to see that all orders and instructions from the proper authority pertaining to the public schools of the island are rigidly and impartially enforced. He shall make annually, to the secretary of public instruction, a report of the public schools of the island, which shall contain an abstract of the reports herein required to be made to him, and such other information as he may deem valuable; and he shall make such special reports as may be required by the military governor or secretary of public instruction. It shall be his further duty to superintend the building of schoolhouses throughout the isiand, and direct the purchase and disposition of such supplies as the military governor may authorize.

## BOARD OF SUPERINTENDENTS.

Composition of the board.-There shall be a superintendent of the public schools of the island, to be appointed by the military governor upon the recommendation of the secretary of public instruction and to be known as the island superintendent of public schools, who shall be assisted in each province in the performance of his duties by an assistant to be appointed in the same manner as the island superintendent, and to be known as the provincial superintendent of public schools; the island superintendent as president, with the provincial superintendents as members, shall constitute a board of superintendents for the public schools of the island.

Duties of board and individual superintendents.--Each provincial superintendent is the assistant and agent of the commissioner of public schools in the general government and management of the public schools of the island. The board of superintendents shall fix upon and introduce proper methods of teaching in the public schools of Cuba, and shall select text-books, and arrange the courscs of studies for the different grades of public schools throughout the island; and in all schools of the island which are of the same grade, the same text-books and the same courses of study shall be used.

## CLASSIFICATION OF DISTRICTS.

Classes of school districts.-The island is hereby divided into school districts to be styled, respectively city districts of the first class, city districts of the second class, and municipal districts.

City districts of the first class.-Each city of the island having a population of 30,000 or more by the last preceding census of the island shall constitute a city district of the first class. Under this paragraph the following cities are announced as forming city districts of the first class: Habana, Santiago, Matanzas, Cienfuegos, and Puerto Principe.

City districts of the second class.-Each city having a population of more than 10,000 and less than 30,000 by the last preceding census of the island shall constitute a city district of the second class. Under this paragraph the following cities are announced as forming city districts of the second class: Cardenas, Manzanillo, Guanabacoa, Santa Clara, Sancti Spiritus, Regla, Trinidad, and Sagua la Grande.

Municipal districts-Each organized municipality, exclusive of any of its territory included in a city district, shall constitute a school district, to be styled a municipal district.

## CITY DISTRICTS OF THE FIRST CLASS.

Board of education.-The board of education in city districts of the first class shall consist of a school council and a school director.

School council.-A legislative power and authority shall be vested in the school council, which shall consist of seven members to be elected by the qualified electors residing in such district, and no two members of the council shall be residents of the same ward.

School council clection and tcrm.-The first election for such council shall be held on the same day as the annual municipal elections in 1901, at which election three members of the council shall be elected for a term of two years, and their successors shall be elected at the annual municipal election for 1903, and biennially thereafter, and four members of the council shall at such election in 1901 be elected for a term of one year, and their successors shall be elected at the annual municipal election of 1902 for a term of two years, and biennially thereafter, and all members of the council shall serve until their successors are elected and qualify.

President and clerk.-The council shall organize annually by choosing one of their members president, also a clerk, who shall not be a member thereof, and who shall receive a salary to be fixed by the council which shall not exceed $\$ 1,500$ per year.

Teachers and cmployces.-The council shall provide for the appointment of all necessary teachers and employees, and prescribe their duties and fix their compensation.

School dirctor; clection and powcrs.-The executive power and authority shall be vested in the school director, and in the performance of his duties as chief executive officer he shall be guided by this order, and by such rules and orders as may be promulgated by proper authority, and by the resolutions of the council. He shall be elceted by the qualificd electors of the districts.

He shall devote his entire time to the duties of his office, and shall reccive an annual salary of $\$ 2,000$, payable monthly; and before entering upon the discharge of the duties of his office shall give bond, to be approved by the board, for the faithful performance thereof, in the sum of $\$ 5,000$, which bond shall be deposited with the clerk within ten days from date of election and preserved by him. The director shall report to the council annually, or oftener, if required, as to all matters under his supervision; he shall attend all meetings of the council and may take part in its deliberations, subject to its rules, but shall not have the right to vote except in case of a tie.

Superintendent of instruction.-The council shall appoint a superintendent of instruction, who shall remain in office during good behavior, and the council may at any time, for sufficient cause, remove him; but the order for such removal shall be in writing, specifying the cause therefor, and shall be entered upon the records of the council.

Powers and duties.-The superintendent of instruction shall have the sole power to appoint and discharge, with the approval of the council, all assistants and teachers authorized by the council to be employed, and shall report to the council, in writing, quarterly, and oftener if necessary, as to all matters under his supervision, and may be required by the council to attend any or all oif its meetings; and except as otherwise provided in this order all employees of the board of education shall be appointed or employed by the school director.

Mcetings of the board of education, regular and special.-The board of education shall hold regular meetings once every two weeks, and may hold such special mectings as it may deem necessary. It may fill all vacancies that occur in the board until the next annual election, and may make such rules and regulations for its own government as it may deem necessary, but such rules and regulations must be consistent with this order.

## CITY DISTRICTS OF TIIE SECOND CLASS.

Board of education.-In city districts of the second class the board of education shall consist of six members, who shall be judicious and competent persons with the qualifications of an elector therein, and shall be elected by ballot at the annual municipal election in 1901 by the qualified electors of the city.

Elections.-Those elected shall be divided, upon the fifteenth day thereafter, by lot, into three equal classes; the members of the first class shall serve for one year, the members of the second class for
two years, and the members of the third class for three years. All elections of members for the board of education thereafter shall be held at the regular municipal election annually, and all members shall serve until their successors are elected and qualified.

Judges of elcction.-The election for members of the board of education in city districts of the second class shall be held by the same judges and clerks provided for the municipal election, and returns of sueh election, duly certified as in other cases, shall be made within five days to the clerk of the board of education of any such city.
The board of education shall hold regular meetings once every two weeks, and may hold such special meetings as it may deem necessary. It may fill all vacancies that occur in the board until the next annual election, and may make such rules and regulations for its own government as it may deem necessary, but such rules and regulations must be eonsistent with this order. It shall organize annually by choosing one of its members president.

Municipal board of cducation.-The board of education of eaeh munieipal district shall consist of the mayor of the municipality, who shall be president of the board, and one director clected for a term of three years from eaeh subdistrict; provided, that if the number of subdistriets in any municipal district exceeds fifteen the board of education shall eonsist, exclusive of the president, of those directors who have one and two years still to serve; and that if the number of subdistricts exceed twenty-four the board of education shall consist, exelusive of the president, of those direetors who have but one year to serve. The director of each subdistriet is the representative of the inhabitants of that subdistrict in educational matters, and if not a member of the board of education shall represent to the board in writing the wants of his subdistrict.
Election and qualification of dircctors.-There shall be elected by ballot as soon as possible after paragraph following of this order has been complied with in each subdistriet, by the qualified electors thereof, one competent person, to be styled direetor. These directors shall meet at the office of the mayor of the municipality, and shall be divided upon the third Saturday after such election by lot into three classes, as nearly equal as possible. The directors of the first class shall serve for the term of one year, the directors of the seeond class for two years, and the directors of the third elass for three years. All eleetions of directors thereafter shall be held on the last Saturday of April annually, and all directors shall serve until their successors are clected and qualify.

## REORGANIZATION OF DISTRICTS.

Division into subdistricts.-The board of education of each municipal district provided for in order No. 226 shall at once divide its munieipal distriet, exclusive of whatever territory may be comprised in a city district of the first or second class, into subdistricts. No subdistrict shall contain less than 60 resident scholars by enumeration, except in cascs where, in the opinion of the board, it is absolutely necessary to reduce the number. The division shall be so made that the number of teachers shall not be increased over that employed at the time this order is received.
Number of schools in subdistrict.-No subdistrict shall be without at least one school, open to children of both sexes, or if not such a mixed school, then at least two schools, one for boys and one for girls. In rural subdistricts it is preferable to have but one mixed school to a subdistrict. In cities of either the first or second class subdistriets may have one or more schools for girls, and one or more for boys. Schools of any subdistrict shall be in the same building, unless this is absolutely impossible, in which case they shall be as near together as possible.

REPORTS.
Annual report of board of clucation. -The board of education of each district shall make a report to the provisional superintendent, on or before the last day of August of eaeh year, containing a statement of the expenditures of the board, the number of schools sustained, the length of time such schools were sustained, the enrollment of pupils, the average monthly enrollment, and average daily attendance, the number of teaehers employed and their salaries, the number of schoolhouses and schoolrooms, and such other items as the commissioner of public sehools may require.

PROVISIONS APPLYING TO ALL SCHOOL BOARDS.
What property the boaids have title to.-All property, real or personal, which has heretofore vested in and is now held by any board of education for the use of public or common schools in any district is hereby vested in the board of education provided for in this ordcr, and having under this order jurisdiction and control of the schools in such district.
School propcrty exempt from taxation.-All property, real or personal, vested in any board of education shall be exempt from tax and from sale on execution or other writ or order in the nature of an execution.
Illegal use of schoolhouses.-Schoolrooms shall be secured in healthful localities, and shall be clean, well ventilated, and well lighted, and all rooms, buildings, or parts of buildings rented or assigned for school use shall be used exclusively for school purposes, and no teacher, janitor, or other person shall dwell therein.

Sufficient schools must be providcd.-Each board of education shall establish a sufficient number of schools to provide for the frce education of the youth of school age in the district under its control, at such places as will be most convenient for the attendance of the largest number of such youth, and shall continue each and every day school so established thirty-six weeks in each school year; and each municipal board of education shall establish at least one primary school in cach subdistrict under its control. ${ }^{1}$
Schools at children's homes and orphan asylums.-The board of any district in which a children's home or orphans' asylum is or may be established by law shall, when requested by the directors of such children's home or orphans' asylum, establish in such home or asylum a separate school, so as to afford to the children therein, as far as practicable, the advantages and privileges of the commonschool education. All schools so established in any such home or asylum shall be under the control and management of the directors of such institution, which directors shall, in the control and management of such schools, as far as practicable, be subject to the same laws that boards of education and other school officers are who have charge of the common schools of such district; and the teacher of any such school so established shall make all reports required by this order as any other teacher of the district and to the same officers.
Evening schools.-In any district, or part thereof, parents or guardians of children of school age may petition the board of education to organize an evening school. The petition shall contain the names of not less than twenty-five youths of school age who will attend such school, and who, for reasons satisfactory to the board, are prevented from attending day school. Upon receiving such petition the board of education shall provide a suitable room for the evening school and employ a competent person, who holds a regularly issued teacher's certificate, to teach it. Such board may discontinue any such evening school when the arerage evening attendance for any month falls below twelve.

Who may be admitted to public schools. -Schools of each district shall be free to all unmarried youth between 6 and 18 years of age who are children, wards, or apprentices of actual residents of the district, including children of proper age who are or may be inmates of a children's home or orphans' asylum located in any such school district, prorided that all unmarried youth of school age living apart from their parents or guardians and who work to support themselves by their own labor shall be entitled to attend school free in the district in which they are employed. The several boards shall make such assignment of the unmarried youth of their respective districts to the schools established by them as will in their opinion best promote the interests of education in their district.

Suspension and expulsion of pupils.-No pupil shall be suspended from school by a superintendent or teacher except for such time as may be neccssary to convene the board of education, and no pupil shall be expelled except by a vote of two-thirds of such board, and not until the parent or guardian of the offending pupil has been notified of the proposed expulsion and permitted to be heard against the same, and no pupil shall be suspended or expclled from any school beyond the current term thereof.

Boards to control school and appoint officers.-Each board of education shall have the management and control of the public schools of the district, except as otherwise provided for boards of education in city districts, with full power to appoint principals, teachers, janitors, and other employees, and fix their salaries or pay, provided such salaries each month do not exceed the following: In Habana, $\$ 65$; in the capitals of provinces and in Cardenas and Cienfuegos, 850 ; in all other municipalitics, $\$ 40$, except for all teachers in schools with an average attendance of less than 30 pupils, in which case the salary shall not exceed $\$ 30$; and any person serving as a regular teacher of a school and also having the supervision of not less than two other schools shall be rated as a principal on the rolls and receive the additional sum of $\$ 10$ per month. Such salaries or pay may be increased, but shall not be diminished during the term for which the appointment is made; but no person shall be appointed for a longer time than one year, and the board of cducation may dismiss any appointee for inefficiency, neglect of duty, immorality, or improper conduct. Women only shall be employed in schools for girls; either women or men may be employed in schools for boys. For similar services women and men shall at all times reccive equal pay.

## ENUMERATION.

Yearly enumeration of school youth.-There shall be taken in each district annually during the two weeks ending on the fourth Saturday of March an enumeration of all unmarried youths, denoting sex, between 6 and 18 years of age, resident within the district and not temporarily there, designating also the number between 6 and 8 years of age; the number between 8 and 14 years of age, the number between 14 and 16 years of age, and the number between 16 and 18 years of age.

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## ATTENDANCE.

Time of attendance.-Every parent, guardian, or other person having charge of any child between the ages of 6 and 14 years, shall send such child to a public, private, or parochial school not less than twenty weeks, at least ten wecks of which, commencing with the first four weeks of the school year, shall be consecutive, occasional daily absence for reasonable excuse excepted.

Excusal from such attendance.-Unless the child is excused from such attendance by the president of the board of education in municipal districts, or city districts of the second class, and the superintendent of instruction in city districts of the first class, upon a satisfactory showing either that the bodily or mental condition of the child does not permit of its attending school, or that the child is being instructed at home by a person qualified, in the opinion of the clerk of the board of education, to teach writing, spelling, reading, geography, and arithmetic.
Employment of children under 14 years of age. - No child under the age of 14 years shall be employed by any person, company, or corporation during the school term, and while the public schools are in session, unless the parent, guardian, or person in charge of such child shall have fully complied with the requirements of the preceding paragraph. Every person, company, or corporation shall require proof of such compliance before employing. any such minor, and shall make and keep a written record of the proof given, and shall, upon the request of the truant officer hereinafter provided for, permit him to examine such rccord. Any person, company, or corporation employing any child contrary to the provisions of this paragraph shall be fined not less than $\$ 25$ nor more than $\$ 50$.

When child is exempt.-When any truant officer is satisfied that any child compelled to attend school by the provisions preceding is unable to attend school because absolutely required to work, at home or elsewhere, in order to support itself or help support or care for others legally entitled to its support who arc unable to support or care for themselves, the truant officer shall report the case to the board of education, who may exempt such child from the provisions preceding.

Duty of commissioner of public schools.-It shall be the duty of the commissioner of public schools from time to time, whenever deemed advisable, to formulate and forward to boards of education throughout the island regulations and suggestions for the instruction and guidance of all persons charged with the enforcement of the preceding six paragraphs or any of their provisions.

## TEACHERS' INSTITUT T.

Organization by board of supcrintendents.-It shall be the duty of the board of superintendents to organize in each province at least one teachers' institute, and more than one if, in the opinion of the board of superintendents, one will not accommodate all the teachers of the province.
Number and salaries of instructors and lecturers.-The board of superintendents shall determine upon the number and salaries of instructors and lecturcrs of any institute and the length of each session of the institute, provided that no session shall continue less than four school weeks.

Attcndancc of teachers necessary to collect vacation salaries.-Each teacher shall attend at least one complete session of the institute in order to obtain his salary during the vacation period.

Institutc fund.-As a condition of attending the institute each teacher shall deposit with an individual, to be designated by the board of superintendents, the amount of $\$ 5$, which shall form the institute fund. This fund shall be used to cover the necessary expenses of the institute, and shall be expended and accounted for as dircted in order from time to time. If the expense of the institute exceed in amount the institute fund, the unpaid balance shall be paid from the island revenues. If the institute fund for any year exceeds the expenses of the institute for that year, such excess shall go to form a sinking fund for the support of the institute.

Organization of institutc.-The board of superintendents shall, at their regular meeting in October, 1900, decide upon a plan of organization of the teachers' institutes of the island for the school years of 1900-1901 and submit the same to the secretary of public instruction and the military governor for approval as soon thereafter as possible.

BOARD OF EXAMINERS.

Plans for cxaminations of icachors.-The board of superintendents shall, at their regular meeting in October, 1900, decide upon a plan for the examination of the teachers of the island as to their qualification to teach, and shall present the same in writing to the military governor, through the secretary of public instruction, as soon thereafter as possible for his approval.

Certificate a requisite to employment of tcacher.-After the approval and publication of the plan mentioned in the preceding paragraph, no person shall be employed as teacher in a common school who has not obtained from a board of examiners having competent jurisdiction a certificate of good moral character and that he or she is qualified to teach such branches of study as the board of superintendents may decide upon and possesses adequate knowledge of the theory and practice of teaching.

All salaries and fines mentioned in this order shall be payable in United States currency or its equivalent.
J. B. Hickey, Assistant Adjutant-General.

## The following statistics of higher and secondary instruction are supplied by the courtesy of the Secretary of Public Instruction of Cuba.

THE UNIVERSITY.
Attendance by facultics and schools for the academic year 1900-1901.
Faculty of letters and seienees:

School of pedagogy ..................................................................................................................... 58
School of scienees................................................................................................................. 8
Sehool of engineering .......................................................................................................... 73
School of agronomy ........................................................................................................ 5
Attending two or more schools in the same year ........................................................... 13
Total............................................................................................................ 159
Faeulty of medieine and pharmaey:
Sehool of medicine ........................................................................................................ 230
School of pharmaey ............................................................................................................ 74
Sehool of dental surgery............................................................................................. 8
School of midwifery .......................................................................................................... 4
Sehool of nurses ............................................................................................................. 22
Total....................................................................................................................... 338
Faculty of law:
Sehool of eivil law................................................................................................................. 84
Sehool of publie law .......................................................................................................... 6
Sehool of notaries ..................................................................................................................... 1
Attending two or more sehools in the same year .................................................................... 74
Total............................................................................................................ 165
Average atten dance at the private eourse in anthropology .................................................. 25

SECONDARY INSTRUCTION.
Attendance at the institutes of the island and anmexed schools.

| Institutes. | Secondary instruetion. |  |  | Sehools of surveying. | Sehool of eommeree. | School of cos-mography. | Academy of stenography and type-writing. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Preparatory studies. | Gen- <br> eral <br> studies. | Total. |  |  |  |  |  |
| Habana | 18 | 143 | 161 |  | 31 | 2 | 100 | 294 |
| Pinar del Rio | 19 | 40 | 59 |  |  |  |  | 59 |
| Matanzas. | 9 | 64 | 73 | 3 | ....... |  |  | 76 |
| Santa Clara | 36 | 56 | 92 |  |  |  |  | 92 |
| Puerto Principe. | 12 | 42 | 54 | 24 |  |  |  | 78 |
| Santiago de Cuba | 76 | 86 | 162 | 11 |  |  |  | 173 |
| Total. | 170 | 431 | 601 | 38 | 31 | 2 | 100 | 772 |

Students in the eolleges incorporated in the institutes of the island:

Institute of Habana

170

Institute of Santa Clara. ............................................................................................................ 27

Institute of Santiago de Cuba.................................................................................................................... 20



Students in the sehool of painting and seulpture:
Elementary studies-
Males........................................................................................................................... 214
Females ....................................................................................................................... 208
Advanced studies-
Males.................................................................................................................................. 37


Total.
490

Students in the school of arts and trades:
Day school............................................................................................................................. 246


Attendanee at the summer normul schools.

| Province. | Male teachers. | Female teachers. | Others attending the course. | Total. |
| :---: | :---: | :---: | :---: | :---: |
| Pinar del Rio. | 37 | 55 | 40 | 132 |
| Habana... | 229 | 376 | 507 | 1,112 |
| Matanzas . | 92 | 162 | 139 | 393 |
| Santa Clara | 81 | 149 |  | 230 |
| Puerto Principe. | 27 | 77 |  | 104 |
| Santiago de Cuba.. | 59 | 85 | 70 | 214 |
| Total. | 525 | 904 | 756 | 2,185 |

There were also 525 persons attending 19 summer schools of pedagogy in the various cities in the different provinces of the island.

From the census of Cuba, taken under the direction of Gen. J. P. Sanger, U. S. A., the following instructive table relating to education is taken:


The conclusion drawn from the census figures is that literacy is greater in the cities than in the rural districts, rather more than one-third of the total population of Cuba being able to read, while in Habana the proportion was nearly two-thirds and in thirteen other cities it averaged nearly three-fifths, while in rural Cuba it was not quite one-fourth.

Two organizations for educating young Cubans which have been effected by benevolent persons in the United States deserve mention. One is the Cuban Educational Association, the object of which is to secure for Cuban boys an education in the various colleges in the United States on condition that they return to Cuba, finish their special education, if they wish, at the University of Habana, and make their home in Cuba. The idea is that these students will become familiar with American ideas and customs in this way. In May, 1899, there were forty Cuban young men matriculated in colleges in the United States, and in May, 1900, it was said, some 1,500 Cuban and Porto Rican youths were students in the colleges and advanced scientinc and technical schools of this country. All are under engagement to return to their homes on completing their studies. Their tuition is free. Some are supported by their relatives, and all are encouraged to contribute to their own self-support. The association, through its secretary, keeps watch over all these students, and is kept informed of the progress and conduct of each. The officers of the association are Maj. Gen. Joseph Wheeler, president; Gilbert K. Harroun, treasurer of Union College, secretary and treasurer, and Messrs. Alexander E. Orr, Nicholas Murray Butler, Albert Shaw, and William H. Baldwin, are mentioned as active workers, with Maj. Gen. Leonard Wood, Gen. Calixto Garcia, Hon. Theodore Roosevelt, and Ferdinand W. Peck among the directors.

The other benevolent organization referred to is the Cuban Orphan Society, with Francis V. Green, president, Robert Bacon, treasurer, and William B. Buck, secre-
tary. The vice-presidents are Messrs. William T. Blodgett, Charles W. Gould, and Cornelius N. Bliss. The office is at No. 11 Broadway (room 558), New York City. The scope of the work of the Cuban Orphan Society is confined to the care and education of orphan and destitute children in Cuba, and the trustees have adhered very rigidly to this limitation of their work. The policy of the society is not to give food and shelter to large numbers, as the insular govermment has declared its intention of providing in this way for all orphan and destitute children in the island. The society lays stress upon its educational work for young children preferably, and particularly industrial training, which will enable the orphan and destitute children to earn their own livelihood and thas become self-supporting members of the community.

## PORTO RICO.

The former condition of the poorer people of Porto Rico was unfarorable to popular education. Poverty bred apathy, and the antecedents of the greater part of the people, from an intellectual standpoint, were unfortunate.

Over 83 per cent of the population, according to the report of General Davis, could not read or write in 1899. The misfortunes, too, of flood and famine, which have occurred since the American occupation, have in themselves been such a check to enterprise of any kind as to forbid expectation of progress in education. Nevertheless, a decided change has taken place. With a conviction that the common school is a safeguard of the people, the military governor, General Henry, recommended the reorganization of the school system of the island, the need of which was recognized by representative Porto Ricans, who had already drawn up resolutions requiring the establishment of kindergartens and normal schools, and asking other changes after the pattern of schools in the United States. Gen. John Eaton, formerly United States Commissioner of Education, was appointed by Señor Salvador Carbonell, the secretary of the interior, on December 31, 1898, to take charge of the work of reorganization, and he continued in office as chief of the bureau of education of Porto Rico until May, 1900. The report of General Eaton npon education in the island forms Chapter IV of the present Report. It affords a complete account of the condition of education in the island up to the time that General Eaton left. He was succeeded in his duties by Dr. Victor S. Clark, who presented a very full report on education in Porto Rico to Gen. George W. Davis, military commander.

Dr. Clark was succeeded by Maj. George G. Goff, who in turn was followed by Prof. Martin G. Brumbaugh, of the University of Pennsylvania, who was appointed commissioner of education for Porto Rico (unter the act of Congress of April 12, 1900) in August, 1900.

From the report on education in Porto Rico, by Dr. Victor S. Clark, to General Davis, military commander, made in February, 1900, the following partieulars are taken: The Americans found a collegiate institute, with 16 professors and assistants and an attendance of 60 , which was founded in 1880; a normal school for giris, with 8 teachers and 50 pupils, and an industrial school. The curriculum of the instittte included Latin, Spanish, geography, history, arithmetic, algebra, rhetoric, geometry, psychology, logic and ethics, physies, chemistry, natnral history, and agriculture. The institute granted the degree of B. A. The professors were required to be graduates of an university. The industrial school was equipped for instruction in the trades of typesetting, carpentering, bookbinding, tailoring, shoemaking, masonry, model making, sculpture, lithography, the manufacture of tobacco, and in chemical industries. There was a branch for women, where drawing was taught. The total attendance at this school for 1897 and 1898 was 312 . Tuition was free. The methods of instruction in the institute and normal school, being judged defeative by a com-
mittee appointed to investigate them both, were suspended at the close of the scholastic year, in June, 1899.

The salaries of the professors, secretaries, clerks, janitor, messenger, and servant of the institute amounted to $\$ 26,780$ a year, and of the normal school to $\$ 8,600$. The institute had no building.

The Americans found the common-school system in an unsatistactory condition. There were no schoolhouses which had been especially built for the purpose, and suitable school furniture and material were wanting, while the school was often kept in the dwelling of the teacher, who frequently carried on some other occupation while performing his function of teacher. This condition was recognized and deplored by the Spanish inspectors in 1880, who also, like the American supervisors, reported upon the illiteracy of the population, the incompetence of the teachers, their ignorance of methods, the want of school accommodations, furniture, text-books, maps, blackboards, etc. The cause of this state of things is to be found in the political and social condition of the island, and is explained in the interesting history of education in Porto Rico under the Spanish rule, by Señor Enrique C. Hemandez, secretary of the insular board of education, contained in Dr. Clark's report. From that history we see that the Porto Ricans always had more or less education for the wealthy class, but that public primary education had been neglected (as it was in the mother country and elsewhere in Europe) until 1820, notwithstanding laudable efforts of municipalities and individuals to establish schools. The conditions of the island practically forbade schools. The wealthy young men attended the Latin, philosophy, and theology classes in the cloisters and private schools, and went to the University of Santo Domingo to complete their studies, or, as an old report runs, the parents "found themselves impelled by necessity or unhappy fate to send them to North America to be educated as well as possible, the remedy being worse than the disease itself which they were trying to avoid." Under the Jesuits and also under the auspices of the economic society of the island secondary schools were founded and lasted a few years, as well as private schools and academies for both boys and girls. In 1820 primary education was made free and compulsory by the Spanish law, but the law was practically a dead letter, and it was not until 1865, when General Mesina, who had public education really at heart, came to the island as governor, that a serious move was made. By the organic decree of that year primary instruction was divided into elementary and superior (as in Spain), and a normal school was also decreed, besides infant schools and schools for adults. The decree, however, on account of opposition of the ayuntamientos, did not take effect until 1874, after the establishment of a republic in Spain. In June, 1867, there were 296 schools, with 9,472 pupils, and their cost was $\$ 90,833$, and in June, 1869, there were 313 schools, with 8,129 pupils, and the expenditure was $\$ 88,136$. After the restoration of the Bourbons the Porto Rican teachers were replaced by Spaniards, who were often appointed more for political reasons than merit. General Despujol came to Porto Rico as governor in 1876 and devoted his main attention to reorganizing instruction. The island then had 731,645 inhabitants; there were 324 schools, with an attendance of 11,097 and an expenditure of $\$ 129,456$, an increase of only 33 schools in eleven years. General Despujol anticipated the Americans in ascertaining, by means of inspectors, the actual condition of the schools, and their reports, as stated before, were practically identical with those of the Americans twenty years later. They show a knowledge of pedagogical requirements. General Despujoi published the organic decree which bears his name in October of 1880, in which he prescribed the courses of stady, fixed salaries, established rural schools, and endeavored to raise the character and efficiency of the school system in many ways, but political conditions frustrated his plans, so that the condition of the schools found by the Americans in 1898 was much the same as that which existed in 1880.

On June 30, 1898, three months beiore the Americans took possession of the island, the school situation was as follows:

Public schools for boys. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 380
Public schools for girls. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 148
Public schools for adults (in San Juan)............................................................................................. 1

Attendance.


Attendance in private schools. ......................................................................................................... 980
Expenditures.
Pesos.
Salaries of public-school teachers. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $234,912.00$
Maintenance:
Rent for buildings . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $54,386.00$

Industrial instruction. ........................................................................................................ $4,180.00$
Given in prizes . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $3,622.75$
Subsidy granted by Govermment to private schools:
Salaries ............................................................................................................................... 1,620.00
Supplics ..................................................................................................................... 168.00

The Civil Institute of Secondary Instruction was finally established in 1883 with 1,045 students, including those in private schools allied with the institute and home students. The course has already been given. From 1883 to 18984,783 students were enrolled in this institute. At the same time a professional school was established for the preparation of surveyors, builders, commercial and industrial agents, and engineers, besides a trade school, where workmen could acquire a broader and more scientific knowledge of their trades. Both these institutions were shortlived for want of practical instruction, and a new trade or industrial school was started in 1896 with workshops, etc., which was successful. There are a number of private colleges and academies in Porto Rico. Among the private and charitable societies should be particularly mentioned La Sociedad Protectora de la Inteligencia, which had for its object to send poor young men who had distinguished themselves in the examinations, to the United States or Spain to complete their studies.

Another educational institution was the Enseñanza Popular for the instruction of workmen. The subjects taught were reading and writing, history of Spain, political economy, "popular" law, talks upon the works of Samuel Smiles, geography of Porto Rico, and practical ethics. More than one hundred workmen aitended these popular courses.
Such being the condition when the Americans took hold, an order was issued on May 1, 1899, by the military governor, Gen. Guy V. Henry, on recommendation of Gen. John Eaton, director of public instruction, which reorganized the system of education. An insular board of education, consisting of five members, was created July 8, 1899, which was to act in an advisory or superintending capacity. The president of this board was the insular superintendent of education. By the act of Congress of April 12, 1900, the charge of public instruction was placed with a commissioner of education, who is to make such reports as may be required by the United States Commissioner of Education. The order divided the island into school districts, something like those in the United States, provided English supervisorships, prescribed the manner of electing local school boards, established fines for nonattendance to duty on the part of the boards, and provided for district school taxes and the issuance of district bonds. The municipalities were required to provide buildings or quarters for the schools, the schools were graded, the courses of study prescribed, and the qualifications of the teachers were defined and their salaries fixed,
free text-books were provided for, and high schools, a normal school, and professional schools were organized. From a table in Dr. Clark's report it appears that at the close of the school year, June, 1899, there were 212 town schools, 313 country districts with schools and 426 without. In a population of 857,660 there were 152,961 boys and 144,851 girls of school age, of whom only 19,804 boys and 9,368 girls were enrolled in the schools, a total of 29,172 , while the attendance was 21,873 , leaving 268,630 children without school facilities. There were 582 teachers in 1898-99, 74 of whom were Americans. The salaries ranged from $\$ 30$ to $\$ 75$ per month. The municipal expenditure for schools in 1898-99 was $\$ 203,372.99$, and the total expenditure $\$ 279,216$. The appropriation for $1899-1900$ was $\$ 330,050$. In the first term, 1899-1900, the enrollment was 15,440 boys, 8,952 girls; total, 24,392. Average daily attendance, 20,103. Population, 957,779. The board of education offered an annual appropriation of $\$ 20,000$ for any town in the island which would provide a like amount for site and buildings for an industrial and normal school. This offer was accepted by the town of Fajardo, and a secondary school, like the Atlanta University, the Hampton University, and the Carlisle Indian School, with a normal department and a department of scientific horticulture and agriculture, was projected for that municipality. A model and training school was opened in San Juan in September, 1899, with a high-school department. All the instruction in this school, which embraces courses from the kindergarten through the college preparatory, is to be given in English, and the text-books are in English. The teachers are American. The high school has a course of four years, and fits pupils for colleges and universities in the United States. In all the departments of this institution, from kindergarten through the high school or preparatory course, there were enrolled 169 boys and 69 girls; a total of 238 .

The present commissioner of education is Martin G. Brumbaugh, formerly a professor of pedagogies at the University of Pennsylvania. From information furnished by his report to the Secretary of the Interior, October 15, 1900, it appears that in 1900 there are 800 schools to be maintained against 616 the previous year, providing for 9,000 additional pupils. There are now 100 American teachers compared with 67 last year. Fifty per cent of the schools, 409 in actual number, are rural schools.

The normal department of the Fajardo School, the only department for which accommodations were prepared, opened October 1, 1900. There are no public-school buildings in Porto Rico, the schools being conducted in rented houses or rooms, most of them, Professor Brumbangh states, being unsuited for the purpose, and the sanitary conditions are bad. The only building on the island erected for school purposes was built under the American direction, and was destroyed by fire July 1, 1900, together with all the records, books, and supplies of the department of education which had been removed thither. The construction of the building has been criticised. In $1899 \$ 33,000$ was expended for books; in 1900 the estimate for supplies is $\$ 20,000$. Every child in the schools now has free books and supplies without expense to the local boards.

Under the Spanish control 3 per cent of the teachers' salaries was set aside as a pension fund, which was paid quarterly to aged and indigent teachers, and has been administered by the Americans since they took control. No pension fund is now collected, and the commissioner hopes that some provision will be made to renew it.

A pedagogical library and museum is being collected. There are 300 volumes already on hand which, under the department, will increase to 500 by purchase. A library of 5,000 volumes of standard Spanish and American literature which was found in the rooms of a building in San Juan was reconverted into a public library.

The department has made arrangements with thirty leading institutions of the United States to give free instruction to Porto Rican pupils. There are now (1900) 800 teachers and 38,000 pupils in the public schools, and about 300,000 children of school age for whom there are no school facilities. Many are refused admission for
want of accommodation. The expenditures from May to September, 1900, were $\$ 91,057.32$.

From the course of study for the San Juan School, published in Professor Brumbaugh's report, it will be seen that the effort is being made to introduce the most approved method of instruction in use in the United States.

From the census of Porto Rico for 1899, taken under the direction of Lieut. Col. J. P. Sanger, U. S. A., inspector-general, it appears that of the white school population, 5 to 17 years of age, 196,961 in number, 17,516 , or 8.8 per cent, attended school, and of the black school population of the same age limits, 125,432 ins number, 8,282, or 6.6 per cent, attended school in 1899. The total school population was 322,393 ; the attendance was 25,798 , or 8 per cent. The city school population was 16,750 , with an attendance of 3,778 , or 22.5 per cent, while the rural school population was 305,603 , with an attendance of 22,020 , or 7.2 per cent.

It also appears from the same report that in the three cities of Mayaguez, Ponce, and San Juan, about half the population could read, while in the rest of the island the proportion was 13.8 per cent. It appears worthy of comment that the departments containing a very high proportion of colored people have also a large proportion of literates, while those having the largest proportion of whites were those in which illiteracy was most common. It appears that the size of the urban population is of greater influence in this respect than the color of the population. Of the entire population 22.7 per cent of those over 10 years of age could read. The cities and coast regions were better in this respect than the interior of the island. Of the total whites 27.1 per cent could read, and of the total colored 15.6 per cent.
The percentage of pupils to population is given as 3 per cent for whites, 4 per cent for negroes, and 2.2 per cent for mulattoes. The proportion of colored is remarkable.

From the new school law of Porto Rico the following extracts have been taken with a view to illustrate the organization of the school system and the method of appointing teachers and the salaries of the latter.

Besides the school law two other acts were passed by the Porto Rican legislature, providing for the education of Porto Rican young men and women in the United States, at Hampton Institute, Virginia, and the Tuskegee Institute, Alabama.

## GENERAL PROVISIONS.

SEC. 1. That there shall be established and maintained a system of free public schools in Porto Rico, under the direction and supervision of the commissioner of education, for the purpose of providing a liberal education for the children of school age in Porto Rico, for the establishment of higher institutions of learning, including colleges, universities, normal, industrial, mechanical, agricultural, and high schools, together with such other educational agencies as the commissioner of education may from time to time establish and direct.

ELECTION OF SCHOOL DIRECTORS.
SEC. 2. The qualified voters of each school district shall elect at the regular municipal election next succeeding the passage of this act three of their number as directors of the public schools of the district, who shall serve without compensation and whose elcetion shall be certified in the same manner as that of other officers elected at the same time. These three officers shall be known as the school board. They shall proceed by lot to determine their tenure; one shall serve for three years, one for two years, and one for one year, and at each succeeding annual election one direetor shall be elected as above provided to serve for three years; provided that from and after the passage of this act the present school trustees shall serve until the school boards herein provided shall have been duly elected and organized.

DUTIES OF SCHOOL BOARDS.
SEC. 4. The school boards shall have charge of all school buildings in their respective districts. They shall have power to erect, repair, remodel, and improve school property, rent buildings for school purposes, provide suitable furniture and equipment for the same, employ janitors for school buildings, pay house rent for teachers, erect and keep in good order suitable outbuildings, and in general shall perform such duties as the commissioner of education and the law may require.

## SCHOOL FUNDS.

SEC. 5. For the performance of their duties it is hereby ordered that not less than 10 per cent and not more than 20 per cent of all taxes collected and funds received from the insular treasury by any municipality shan be set aside, as collected, and designated as school funds. The money or moneys thus sct aside shall be kept as a separate fund, and shall be apportioned by the ayuntamiento among the respective school boards situatcd in said municipality, said apportionment to be based upon the number of schools actually in operation in the respective school districts; said separate funds shall be disbursed by the treastrer of the school district only upon the written authorization of the officers of the respective school boards in said municipality.

## CLASSIFICATION AND DISMISSAL OF TEACHEPS.

SEc. 14. The tcachers of Porto Rico shall be designated as rural teachers, graded teachers, teachers of English, and principal teachers. They shall all be persons of good moral character, and possessed of the attainments required by law. They may be dismissed from office for cruelty, negligence, immorality, or incompetency, upon investigating procecdings, instituted by the commissioner of education, in which investigation the school board and the teacher shall be heard. Such dismissal shall be made by the commissioner of education, who may, if he so decide, suspend a teacher for the same reasons.

SALAREES OF TEACHERS.
SEC. 15. The salaries of all teachers shall be fixed by the commissioner of education, provided that teachers performing similar service shall receive the same salary, and provided further that the salary of any teacher may be increased by the local school board above the sum set by the commissioner of education; in which case such increase shall be subject to the approval of the commissioncr of education and shall be paid from the school funds herein provided, and not from the department of education.

PURAL TEACHERS.

SEC. 16. A rural teacher shali receive not less than $\$ 30$ per school month for each month of actual service. Rtral teachers shall pass an examination for a certificate to teach in the rural sehools of Porto Rico in the following studies: English langtage, Spanish language, arithmetic, geography, history of the United States and of Porto Rico, and methods of teaching.

GRADED TEACHERS.
SEc. 17. A graded teacher shall receive not less than $\$ 40$ per school month for each month of actual teaching. Candidates for graded certificates shall pass an examination for a certificate to teach in the graded schools of Porto Rico in the following studics: English language, Spanish language, arithmetic, geography, history of the United States and of Porto Rico, and methods of teaching.

TEACHERS OF ENGLISH.
SEC. 18. Teachers of English shall receive not less than $\$ 10$ per school month for each month of actual scrvice. Teachers of English shall be graduates of a first-class high school, normal soliool, college, or university, or a tcacher of extenced experience holding a high-grade certificate from some State of the United States, or they shall pass an examination in the English language, inclading: writing, spelling, reading and grammar, arithmetic, geography, history of the United states, physiology, and methods of teaching. In every village and city maintaining a graded system of schools there shall be at least one teacher of English, and as many more as the commissioner of education may appoint. All teachers of English shall be selected and appointed by the commissioner of education, and shall perform the duties he may assign to them; but in all other respects they shall be subject to the same conditions and regulations governing graded teachers.

## PRINCIPALS OA GRADED SCHOOLS.

SEC. 19. Principals of graded schools shall receive not less than $\$ 60$ per sehool month for each month of actual service. Principals shall be graduates of an accredited normal school, college, or university, or they shall pass an examination for a certincate to teach in the public schools of Porto Rico in the following: studies: All the studies required for a graded certificate, and in addition thereto algebra, geometry, physiology, and such additional stadies as the commissioner of education may require; provided, that no additional study shall be required without giving at least six months' notice of such additional studies. The principal of a graded system of schools shall perform such duties as the commissioner of education may specify.

## SEEECTION OF TEACHERS.

SEc. 20. Teachers other than teachers of English shan be selected for the schools of Porto Rico in the following manner: The school board by a majority vote shall, on or before July 1 of each and every year, certify to the commissioner of education the list of teachers whom they desire to elect
for the next ensuing year. The commissioner of education shall return this list within thirty days, with his approval or disapproval of each teacher so nominated, and the school board shall then proceed to elect for the schools of their respective districts, according to law, from the approved list reccived from the commissioner of cducation, the teachers for the next ensuing school year. Vacan cies shall be filled in the same manner. No applicant for a school shall be certificd to the commissioner of cducation by any school board unless said applicant possesses a legal certificate bearing thesignature of the commissioner of education and the seal of the department of education.

## HIGHER EDUCATION.

SEC. 21. All high institutions of learning established or to be established in Porto Rico shall be such and shall be so organized and conducted as the commissioner of education may from time to time detcrmine, and he shall have full power to make effective this provision; provided, that in no case shall the commissioner of education in the execution of this provision expend any sum in excess of that provided for education in Porto Rico.

DUTIES AND POWERS OF COMMISSIONER OF EDUCATION.
SEC. 23. The commissioner of education being required by act of Congress of April 12, 1900, to supervise education in Porto Rico, he shall, to comply with said act, appoint from time to time supervisors or superintendents of schools, who shall be subject to the commissioner in all respects; he shall prepare and promulgate all courses of study, conduct all examinations, prepare and issue all licenses or certificates to teachers, fix the salaries of teachers, select and purchase all school books, supplies, and equipments necessary for the proper conduct of education, approve of all plans for public school buildings to be erected in Porto Rico, require and collect such statistics and reports from all school boards, supervisors or superintendents, and teachers as he may require, and formulate such rules and regulations as he may from time to time find necessary for the effective administration of his office.

TREATMENT OF PUPILS.
SEC. 25. Teachers in the public schools of Porto Rico shall at all times treat their pupils humancly and kindly, and the commissioner of education shall provide such rules and regulations for the discipline of the pupils in the public schools as to enforce the spirit of this act.

NIGHT SCHOOLS.
SEC. 26. The commissioner of education, upon application of twenty young men, unable to attend day school for justified reasons, may establish a night school in each town, and may also close the same when the average attendance in any one month does not reach twelve students.

## HAWAII.

The report of the minister of public instruction, Mr. E. A. Matt Smith, of Hawaii, for the year ending December 31, 1899, contains a full report on education in the islands by Mr. Henry Schuler Townsend, inspector-general of schools, from which the following brief notes are taken:

It appears that the first missionaries in Hawaii, in 1820, taught the natives the alphabet, and many of the latter learned to read English before their own language was reduced to written form. After this wás effected, before the end of $1824,2,000$ people had learned to read, and a system of schools was extending over the istands; the people were eager to learn reading and writing, and at length nearly the whole population went to school. After this early enthusiasm had exhausted itself, in 1831, a high school was organized for training teachers. This was the Lahainaluna Seminary, which is still in existence. Hilo Boarding School for Boys dates from 1836, as well as a boarding school for girls, and in 1839 an industrial school for boys was opened. Numerous mission schools have sprung up from time to time. Other institutions which have had influence are the Oahu Charity School (1833), which became finally the Honolulu High School, the principal function of which was to teach the half whites English; the Royal School (1840), for chiefs, which subsequently became a school for all Hawaiian boys, and was the leading school for teaching English; and

Punahou School (1841), for the children of missionaries, which was chartered as Oahu College in 1853. In 1839 the Roman Catholic missionaries established their system of schools. In 1840 the first comprehensive written laws were published, and they included a compulsory school law with penalties for both parent and child for noncompliance with the law. The law provided also that no illiterate man should "hold office over any other man," nor could an illiterate man or woman marry. A minister of public instruction was among the functionaries provided by the new laws, the first of whom, after the laws took effect in 1846, was Richard Armstrong, the father of Gen. S. C. Armstrong, who is universally known for his connection with the Hampton Institute. Mr. Armstrong was an admirer and disciple of Horace Mann, whose teachings had, therefore, great influence in the methods he advocated for the common schools. Mr. Armstrong laid special stress upon the importance of industry and industrial training. In 1855 a board of education was established in place of the minister of public instruction, and in 1865 an inspector-generalship of schools was created. In 1876 the reciprocity treaty with the United States ushered in the modern era of commercial progress. The influx of foreigners, especially of Englishspeaking ones, and the increase of business made English more and more the language of business, and the necessity of teaching it in the schools became more and more apparent. English, therefore, became the language of the two principal schools, and its use soon spread to other schools. In 1884 there were 44 day schools, with 100 teachers, in which English was the language of instruction. In 1883 the St. Louis College for Boys was opened under the care of the Brothers of Mary, who had come to work in the Roman Catholic schools. This college had 245 students in 1884. Át this time English was essentially the sole language of the private schools, employing 106 teachers, but was used in less than half the public or common schools. In 1888 all Government schools were made free, and the attendance rose to 8,050 , the total number in both Government and independent schools being 11,307. Since then nearly all the common schools, in which the Hawaiian language was the medium of instruction, have been converted into schools in which English alone is so employed, 98 per cent of the children being at present instructed by teachers who use English. There is a normal and training school which has courses in history (and mythology), including Hawaiian, arithmetic, algebra and geometry, agriculture and manual work, art work, and professional (pedagogical) work. There is, finally, an industrial and reformatory school for boys, with 39 inmates. The following tables show the statistics of schools in 1899:

| Schools. | Number. | Teachers. |  |  | Pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Total. | Male. | Female. | Total. |
| Public. | 143 | 113 | 231 | 344 | 6,345 | 5,041 | 11, 436 |
| Private | 46 | 79 | 121 | 200 | 2,256 | 1,798 | 4,054 |
| Total | 189 | 192 | 352 | 544 | 8,651 | 6,839 | 15, 490 |

There were 760 pupils under 6 years of age, 13,438 between 6 and 15, and 1,292 above 15 years of age. Of the 544 teachers in the public schools in 1899, 62 were Hawaiian, 68 part Hawaiian, 282 American, and the rest of all nationalities, including 6 Japanese and 10 Chinese. In the private schools 11 of the 200 teachers were Hawaiian, 14 part Hawaiian, 122 American, and the rest of various nationalities. Of the 15,490 pupils, 5,043 were Hawaiian, 2,721 part Hawaiian, 601 American, 213 British, 337 German, 3,882 Portuguese, 84 Scandinavian, 1,141 Japanese, 1,314 Chinese, 30 South Sea Islanders, and 124 other foreigners. Each nationality had its own teacher. The relatively small proportion of American pupils is noteworthy.

The expenditures for the two years ending December 31, 1889, were $\$ 575,353$.

## SAMOA.

The following interesting account of the condition of education in Samoa is taken from the letter of a lady who has made herself familiar with the situation by personal observation. She writes as follows:

It will be a year the 17 th of this month [April] since the American flag was formally raised over these islands; many things have been accomplished during that year, but apparently no steps have yet been taken toward the establishing of public schools.
The only efforts for the education of the children in American Samoa are made by missionaries. There is a French Catholic school at Leone, a small one, and there are nine Mormons upon Tutuila who teach English to some extent. But the majority of the Mormons are immature and illiterate, and not at all competent to take the education of any people into their hands. The most systematic and widespread efforts for the education of the young Samoans are made by the London Mission Society, which for seventy years has been doing a most noble work among these people. Their missionaries were the first to come to these islands, when there was no written language, and now, through their efforts, there are over twenty books printed by them in Samoan, including the Bible, several works which would aid particularly in their religious teachings, besides the necessary books to be used in sehool work.
Their finest schools are upon Upolu, in German Samoa, where they have not only a college where young natives are prepared for the work of teaching and preaching to their own peoplc, but one for manual training also, which has been very successful.

A school for girls has recently been opened at Afao, in Leone Bay, it miles from Pagopago, wherc 100 young girls, whose average age is 14 , are taught the usual school branches, besides English, sewing, and ordinary housework. There were many more applicants than there was room for at this school; and so great was the desire of the people to have a school of this kind on this island that they contributed not only the money neeessary for the erection of the building (about $\$ 7,000$ ), but gave their serviees for the clearing of the land, and did the greater part of the manual labor upon the building, under the direction of the resident missionary and one carpenter, who attended to the more difficult parts of the work.

The resident missionary, who has just gone to England for a much-needed and well-earned rest, had a school at Leone, where young men were prepared to enter the higher schools on Upolu. Recently, too, there has been a school opened upon the island of Manua for young men, under the superintendenee of one of the graduates from the college on Upolu, whieh is doing very well.

Every little village-and there are about forty, I believe upon the islands of Tutuila and Manuahas its native pastor, who is also the village schoolmaster. It has been my privilege to visit a number of the village schools. They are all held in the churehes, from one and one-half to two hours in the early morning. There is no school furniture whatever. The pupils sit upon mats spread upon the sand or coral floor. The teacher has a rough blackboard, a Bible, an arithmetic, and an elementary geography. The pupils have an occasional slate and peneil and their Bibles. And yet with these incomplete furnishings the children learn to read, write, and do a little simple arithmetic.

The rest of the day these little creatures, brimful oif activity and energy, run wild, and as they grow older, from never having acquired habits of industry and regularity, become indolent and idle, and do not begin to derive as much benefit from the resources of their fruitiul and beautiful land as they might if in their youth they were trained as our American children arc. It seems to me, if they can acquire so mueh learning under such primitive conditions, they might, with a very little more trouble and expense, be brought to become industrious, capable, and helpful citizens.

The argument has been brought forth that general publie schools will be of no benefit to the young [in Samoa] until they can be entirely removed from the home influences, where everything tends to undo the lessons learned at school; and as examples several cases have been cited where young girls have returned to their homes after a four years' course in a mission school, like that at Afao, and have gone back to their old savage state and apparently forgotten all that they learned while away at school. But to me it has not seemed so strange that they should relapse into old ways, beeause they have been, perhaps, the only girls in their village taught to do differently, and, of course, with their indolent naturcs and fear of ridicule or of being different from other girls, it has been much easier for them to do as the other girls about them did than for them to try to make their companions like themselves.

It seems to me that in order to reach the homes the very young children must be taken while their minds are receptive and impressionable, while they are still full of the restiess aetivity of childhood, and before they have begun to fully develop eharacters and habits. If several children in every household of a village could be taught habits of neatness, industry, and thritt, does it not seem reasonable to suppose that more can be done through them to change the character of their homes than by an oceasional two or three in a village so trained? These people are passionately fond of their young, and the child is the ruler of the family; therefore it seems as though the way to accomplish the greatest reform is to train the children.

They are very quiek to imitate, and a few experienced teachers with a knowledge of kindcrgarten methods could do a marvelous amount of good among them. It could be done with very little
expense, too. The Government need not erect a school building at first. A large native house could be hired for a small sum each month, say 85 , and would be the thing at first, as it is what the children are accustomed to and would be an object lesson as to what could be done with their homes. It is perfectly ventilated and well lighted. Have the floor boarded, as a guard against dampness, and small, low tables built, similar to those the Japanese use in their houses, and with the usual school appliances one has a sanitary schoolhouse at very little expense.

Education is not compulsory here. In the whole of American Samoa there is a school population of 1,500 , about 800 of whom are receiving a desultory education in the village pastors' schools. There are about 150 children of school age in the three villages in the harbor of Pagopago. If only some good philanthropist at home would open three schools-one in each village-and try the experiment of educating the very young, I think it would be found that more could be accomplished toward the enlightenment and advancement of these people than in any other way.

One necessary feature of the training in the schools would need to be simple talks upon health and the care of the body. The ignorance these peonle show in the handling of their young and their sick is appalling, and many lives are lost in consequence.

This interesting and intelligent people are eager for more knowledge. At the opening ceremonies of the girls' school at Afao, in February, all the remarks made by the native chiefs and pastors showed an earnest desire for wider facilities for the education of their young. They realize that it is useless to try to do much with this present generation. In the younger generation just springing up is their hope and they look to our Government for aid. Shall they look in vain?

## CHAPTER XXX.

## EDUCATION AT THE PARIS EXPOSITION. ${ }^{1}$

Contents: General view of the educational exhibits-The French exhibit in detail and in contrast with those of other countries-The educational import of the exhibits as brought out by the examinations and discussions of the jury with regard to (1) salient features of national systems; (2) the methods and results of instruction; (3) methods of exhibiting; (4) special provision for poor and afflicted children; (5) race education-The jury on primary education, from report of Hon. Ferdinand W. Peck, Commissioner-General for the United States.
Appended Papers: The Paris Exposition: Educational Aspects; by Howard J. Rogers, director of education and social economy for the Commissioner-General of the United States-French and English opinions of the educational exhibit of the United States-Catalogue of the United States exhibit, prepared by Mr. J. H. Reynolds, director of the Technical School, Manchester, England.

The Paris Exposition was specially characterized by the prominence given to the products of man's intellectual and social activities. They were presented in three departments-education, sociology, and art-each of which had its own appropriate installation. Inspired by the example of France, every nation represented in these collections had succeeded in making its material attractive and instructive.

The exhibits of education occupied the main part of the gallery of the Palace of Letters, Arts, and Science in the Champs de Mars section of the Exposition. ${ }^{2}$ They had liberal space for display and for effective decorations by means of paintings and flags, and they were surrounded by exhibits in keeping with their own spirit.

To the mere casual observer the section of education presented a striking appearance. The alcove partitions, light and elegant in design, formed a background for colored plates and photographs, while streaming banners and the folds of national fiags gave brilliance to the scene.

The French exhibit of education was naturally the largest and, if detail be considered, the most complete. Of foreign countries Russia occupied the largest space, with an exhibit made peculiarly conspicuous by the use of colored maps, statistical charts, and the Russian flag. Directly opposite was the exhibit of the United States, which was exceedingly attractive to the eye and admirably organized. The Japanese exhibit, set off by light coloring and the red disk of the flag, was placed in the transverse gallery connecting the two main corridors just south of the United States. Beyond it, occupying a portion both of the transverse gallery and of the corridor at right angles, was the exhibit of Great Britain, whose material defied systematic arrangement, but was full of suggestion and instruction for those who examined it. The exhibits of thirteen other countries occupied alcoves adjoining the countries named. Those of six countries, twelve colonies of France, and the provinces of Canada and Cuba were in separate buildings. The exhibits of American publishing houses were in the publishers' building in the Esplanade, and those of the manufacturers of school furniture in the same division in their appropriate group.

With this general survey in mind, we may pass to the consideration (1) of the more conspicuous features of the French material, whose classification had determined, so far as possible, that of all the collections, and (2) to significant points which developed in the course of the jury examinations or discussions.

[^80]The educational exhibit of France comprised the system of public instruction, that is, the exhibit of the ministry of public instruction and the exhibits of independent exhibitors (exposants libres). The collections of the public system were arranged in six classes-primary education, secondary, superior, art, agricultural, and industrial and commercial education. Ascending to the gallery from the main entrance of the building, the visitor was at once attracted to the exhibits of secondary schools, i. e., lycées and colleges. These spread out into the imposing display of the universities, crowned and dominated by that of the University of Paris. The two sections formed thus a complete whole, preserving in the arrangement their intimate relation and their distinction from the primary system, which has a totally different history and aims peculiar to itself.

The class of primary education occupied the most conspicuous position in the gallery, and no effort had been spared to make it impressive. Its arrangement may be seen from the accompanying diagram. ${ }^{1}$


## EXPLANATION OF PLAN.

1. Infant schools (écoles maternelles).-2. Pupils' exercises (cahiers d'élèves).-2'. Model class.3 and $3^{\prime}$. Material illustrating special subjects of instruction (enseignements spéciaux); school museums.- -4 and $4^{\prime}$. Continuation courses for boys (cours complémentaires de garçons).-5. Needlework (Travaux à l'aiguille).-6 and $6^{\prime}$. Rural high schools for boys (Écoles primaires supérieures rurales, garcons).-8, $8^{\prime}$, and 10. City high schools for boys (Ecoles primaires supérieures urbaines, garçons). - 7 and 9. Continuation and high schools for girls (Cours complémentaires et écoles primaires supérieures de jeunes filles).-12. Drawing (Enseignement du dessin); statistics of high schools (statistique de l'enseignement primaire supérieure). $-11,11^{\prime}$, and 13 . Technical training for girls (Enseignement professionnel, filles).-14. National industrial or technical schools for bojs (Ecoles nationales professionnelles); Nantes (14), Vierzon (14'), Armentières ( $14^{\prime \prime}$ ), Voiron ( $14^{\prime \prime \prime}$ ). -15 . Normal schools for women (Écoles normales d'institutrices).-15'. Normal school at Fontenay-aux-Roses.-17'. Normal school at St. Cloud.-16. Central administration.-17. Normal schools for men (Ecoles normales d'instituteurs).-18. Monographs,-19. Agencies auxiliary to the schools (Euvres complémentaires de l'école).-20. Magic-İantern views (Galerie des projections lumineuses).

Besides the floor space, on which stood tables, cases, and easels for exhibiting material, all the wall spaces were utilized for the display of drawings, wood and metal work, entomological collections, etc.
The material had been collected in accordance with explicit directions sent out from the central administration to the academic inspectors and distributed by the latter to the local school authorities. The directions called for the work of pupils and of teachers, historic, deseriptive, and pedagogic monographs, plans and photographs of school buildings, interiors, etc.
In each department of France a special commission was formed to make the first choice from the work submitted. The selected material was then forwarded to the chief city of the "academy," where an academic commission made a second selection.

The care taken to secure typical material is indicated by the special directions relative to normal schools. These provided that if in the academic region "there are two normal schools, one for men, the other for women, whose exhibits fulfill all the conditions for representing model schools, the commission shall make final choice of these two schools. Otherwise the commission shall choose from all the material submitted by schools of this class the elements best suited for an ideal representation of the two types required." All material chosen by the academic commissions was forwarded to Paris, where it was passed upon by a commission appointed by the minister of public instruction. This commission, organized in five subcommissions, passed two months in the daily work of examination and selection, their judgment in the matter being final.

It had been expressly ordered that the pupils' work should in no case be specially prepared for the exhibit and stringent measures were taken to guard against any violation of this order. As a result of this careful preparation the abundant material was not only well chosen but thoroughly classified.

The alcove devoted to iniant schools ( $1^{1}$ ), was one of the chief attractions of the section. It was divided by a passageway, the part on one side representing the play court and the other side the class room of the school. At the entrance to the former, inclosed by a pretty screen, was a lavatory, and on each side spaces for numbered brackets for towels, one for each child. The great feature of this division was a glass case showing groups of dolls at play. In other cases playthings were arranged, and, to the special delight of every child who entered, there was a low table for the display of toys, with a little bench for two children, whose places were taken by beautiful dolls. The playthings were nearly all such as are made by the teachers and the children themselves out of simple material, colored paper, cardboard, shells, bark fashioned into the forms of animals, dolls, dishes, and even little boats and houses. The whole suggested the greatest ingenuity and motherly sympathy on the part of the teacher.

The class room was fitted up with low tables, at which the children are placed for their first school exercises, which maintain often the form of play. The little ones draw and fashion many pretty and useful things, and in the upper classes have regular exercises in writing and reading.

The alcove was adorned by two large paintings-one, The Lavatory (le lavabo), representing a daily scene in the life of the infant school, and the other picturing an infant class in charge of a nun (l'école bretonne). They were executed by M. Geoffroy, a French artist well known for his skill in depicting child life.

The model school of one class room ( $2^{\prime}$ ) under one master illustrated the schools of this kind that may be seen in any part of France. It was completely equipped, wanking only the master and pupils to be a school at work. The teacher's table, on a platform slightly raised, was furnished with the required registers, the notebooks in which the teacher outlines his daily lessons, a pile of pupils' exercise books (cahiers) as if just collected for examination, a set of text-books, and the official

[^81]directions relative to primary schools. The double desks for pupils were arranged in three parallel rows, corresponding to the three divisions of the school-elementary, intermediate, and higher-the desks and seats of each division increasing a little in size and height from the lowest to the highest. Upon each desk was displayed an exercise book (cahier), the inseparable adjunct of the school life of a French child. These books presented a complete transcript of the year's lessons. Here were seen the arithmetical problems, the drawings, and the compositions which had been attempted, and all the other lessons written out in full or indicated by notes. The marginal comments of the teachers showed how carefully the work is examined, and also the ability and progress of the pupil reflected in the teachers' judgments. In all essentials these books were like the 2,000 collected from the entire country, labeled and arranged in the alphabetic order of the departments of France and displayed on tables outside the room (2). The walls of this model school were adorned by several pictures from sets purchased with the small fund allowed by the Government for school decorations. A few maps and natural-history charts were seen, a bust of the Republic conspicuously placed, and a copy of the Declaration of the Rights of Man hung between the portraits of President Loubet and of Pasteur. The blackboard which extended round the wall was covered with specimen lessons, suggestive maxims, and drawings. In particular was noticed a moral sentiment quoted from Jules Ferry and followed by the plan of a lesson upon personal obligations. A somber drawing in colored crayons of the Bastille, with description, ornamented one end of the blackboard and a beautiful moonlight view of the Castle of Chillon the other. All the exercises and drawings had been executed by pupils of a Paris school.
Near the teacher's desk, on one side, was a cabinet of material for object lessons and apparatus for experiments. With few exceptions this material had been made by teachers. Attention was particularly called to the ingenious apparatus for science work-an electroscope, a pyrometer, etc. There was also a complete set of metric weights and measures, colored photographs representing three successive stages in the development of a gillyflower, and a set of material to be used in civic instruction, including a military register, tax bills, receipts, specimens of legal forms, and various other papers with which the ordinary citizen should be familiar. Above this cabinet hung the clock, and opposite it, near the entrance to the room, was a model window garden, which was daily replenished from an outdoor school garden with specimens of the plants included in the official regulations for schools (January 4, 1897). This one room illustrated, by its completeness and finish, the prevailing characteristics of every division. It was in a certain sense also a key to the other divisions of Class I. The cabinet of illustrative material and apparatus gave significance to the manual work which formed a striking feature of the normal-school exhibits. Every teacher is trained in the use of tools and in designing, and can readily represent and manufacture the appliances required in his work. In the normal schools for girls the manual training includes drawing, sewing, cutting and fitting garments, and these schools showed many albums presenting entire courses of instruction in these arts, with illustrated lessons on fibers, textiles, processes of weaving, etc., which are used very effectively in the schools for girls and in particular in the high and continuation schools ( 7 and 9). In primary schools like the one so fully represented are laid also the foundations of that mechanical skill and accuracy which are carried to the highest perfection in the national technical schools (14-14'/').
The general character of the work exhibited by the technical schools may be inferred from the accompanying plate, representing a section of the exhibit made by the school at Armentières. In the main, the wood and metal and decorative work was similar to that from the other schools of this class. Amid innumerable small objects, such as locks and keys, door knobs, boxes, trays, there were large and elaborate pieces in wood and iron-for example, carved cabinets for holding the
smaller pieces, carved tables, ornamented gratings of forged iron, electrical and steam engines, etc.

But Armentières made also a unique exhibit of woven tapestries, as shown in the accompanying picture.

Three sides of the alcove were each divided into two panels, covered with a woven tapestry designed and manufactured by the students. The panels were finished above by a border of tapestry, repeating the elements of the design beneath and harmonious with it in color. The walls below the panels were finished in a beautiful oak wainscot. In the center of each panel was a picture showing the flower which furnished the motive of decoration, its conventionalized forms, and the final design as applied to the tapestry. The subjects employed were the chestnut, fern, passion flower, amaryllis, and cyclamen, all of which were very freely treated in the designs.


One panel of the alcove devoted to the school of Armentières.
The exhibit of Armentières was completed, as in the case of the other technical schools, by drawings and designs in pencil and color displayed on separate sheets and in large folios, by the usual "cahiers" and by pamphlets giving the history of the school, its programmes, etc.

One of the most interesting alcoves of Class I was that devoted to the work of teachers $(18,19)$. Here were shown elaborate manuscript histories of communal schools, and even of the communes themselves, theses and discussions of pedagogical principles and methods, familiar objects, natural-history collections and apparatus to be used in teaching, all systematically arranged and distinctly labeled. A corner of the alcove was reserved for the collection of documents and statistical charts relative to what is termed by the French post-school work (œuvre post-scolaire). This work consists in courses of instruction and popular lectures for adults and youthe above school age; in other words, it represents a form of university extension for the masses.

Science, domestic hygiene, and geography are the favorite subjects of the lectures and systematic lessons. The methods by which these subjects are unfolded were readily understood from the colored plates of illustrative material and the outline programmes conspicuously displayed on the walls. In the small hall (20) adjoining the alcove were shown the sets of magic-lantern views furnished by the Government through the agency of the Musée pédagogique and by the Ligue de l'enseignc ment for the use of the teachers and professors who conduct the work. The morement affords a striking illustration of the means by which the sense of social solidarity may be excited in communities to the enrichment of national life. This sense of common interests is cultivated also in the elementary schools by various forms of assistance for poor children, such as mutual aid associations formed among pupils and associations of former pupils who exercise a fraternal watch care over their successors. These were properly included in the corner of the alcove devoted to "auxiliary agencies."

In the hall of the central administration (16) was shown an immense collection of official publications pertaining to the system of education, including three volumes specially prepared for the exposition ${ }^{1}$ and two large statistical plates with diagrams in black and gold showing the development of the system from 1870 to 1900.

To the ordinary visitor the most attractive feature of the whole section was the retrospective exhibit, which occupied a large room to the left of the central administration. The collections pertained to the three great divisions of public educationprimary (Class I), secondary (Class II), and superior (Class III). It comprised documents dating as far back as the sixteenth century and "caliers," or exercise books, from the first part of the nineteenth century, written as fine as engraving with ornamental titles and initial letters. The walls were hung with engravings and fine photographs representing juvenile life, famous institutions, and, above all, the portraits of the most eminent men who have fostered the intellectual life of France.

The diagram ( p . 1662) gives but a faint idea of the space allotted to the independent exhibits, which was, in fact, equal to that occupied by the public system.

The most impressive of these exhibits pertained to the great teaching orders-the Christian Brothers, the Teaching Brotherhoods, the Sisters of Charity, etc.-which bear so large a part in the education of the youth of France. Their presence in this exposition was a significant sign of the confidence of the Government in its ability to maintain its own institutions against these powerful rivals, which were excluded from the exposition of 1889. Scarcely less extensive than the exhibits of the religious associations were those of the private secular associations, whose work is rather auxiliary to than in rivalry with the State schools. Conspicuous among these was the Philotechnic Association of Paris, which provides for the gratuitous instruction of adults on a large and liberal scale, and the Ligue française de l'enseignement, which carries on a perpetual and ardent campaign in the interests of popular education, and supplements the work of schools by a great variety of educational and benevolent agencies.

The characteristic features of Class I were repeated throughout all the sertions of the French exhibit. Everywhere there was wealth of material, admirable classification, and artistic finish. The emphasis on industrial training in the primary section prepared the mind for the magnificent display of the specialized agricultural, commercial, and industrial art schools for which France is justly celebrated. These exhibits, starting at the south and west borders of the exhibit of the ministry of public instruction, extended far beyond the limits of the main building into an annex much larger than the whole space assigned to the United States. The exhibitors in these three classes (IV, V, VI) were the ministries of public instruction, agriculture,

[^82]and commerce, municipalities, private associations, lay and religious, and private individuals.

The exhibits of the primary and special schools of Paris were appropriately placed in the Ville de Paris, one of the most beautiful of the Exposition buildings. Here were displayed on an elaborate scale all the activities which manifest the collective life of the capital. Although under the ministry of public instruction, the primary and technical schools of Paris are maintained by the city, and are essentially its creation. It would naturally be expected that their exhibit would form the crown of the educational section, and in a measure this was the case.

The art work of the Paris schools, especially that of the higher primary and technical schools, surpassed anything of the kind to be seen elsewhere. This was true in respect to the two lines of art training, free-hand and geometric, which are kept entirely distinct, and which were shown in their development through the whole course, from the feeble beginnings in the infant schools to the elaborate designs, sketches, and working drawings of the higher primary and special schools. But considering the entire range of school work, the Paris exhibit could claim little superiority to that of the country at large. Indeed, the most significant impression which the French exhibit left was that of a wonderful uniformity of results and a high general level of excellence attained in all the schools, urban and rural.

The classification of the French exhibits was necessarily followed by other exhibiting countries, since it determined that of the class juries and the provinces within which their judgment was exercised. This arrangement was, on the whole, well adapted to the educational systems of other countries of Europe, which, as a rule, differ from France not so much in the classification of schools as in their conduct and in the greater or less development of certain phases of education. Thus, by comparison with the French exhibit the low state of the primary schools of Italy, Spain, and Portugal was emphasized, and the sinall part which the æsthetic element plays in the industrial training of the Scandinavian countries.

Theoretically the classification was applicable to Great Britain, or at least to England, but on account of the peculiarly disorganized state of the educational agencies of that country and their high degree of local independence and individuality the material did not lend itself readily to the French scheme. The English director, therefore, wisely gave up the endeavor to force his material within the set lines. The terms which distinguish the different classes of French schools are employed in the United States, but with distinctions which were simply emphasized by the plan of the exhibits. They are radical distinctions, lying deep in the very conception of the State and of citizenship, as will presently be shown.

For effectiveness no exhibit surpassed our own, and if the French exhibit may be taken as the most perfect illustration of systematic arrangement and artistic taste preserved throughout an overwhelming mass of material, the educational exhibit of the United States represents the opposite extreme of system and spirit manifested on a small scale by the careful selection of the typical and significant.

Without further description of the material and its arrangement, it remains to consider the educational bearing of that portion which was the subject of examination and discussion by the international jury on primary education.

In respect both to ideals and to processes the French system presented marked contrasts with our own system, and each was constantly interpreted by reference to the other.

The primary schools of France are not the preliminary stage of an education which may be extended to the highest possible degree, but they are schools for the masses and studiously adjusted to their demands and station.

The idea was apparent even in the infant school (école maternelle) and especially as contrasted with the kindergarten. At first sight the exercises of the former seem freer than those of the kindergarten, but this is because they are more miscellaneous.

They include formal though simple lessons in the three R's, moral instruction, and manual exercises. Amid the weaving, paper cutting, folding, stitching, there are quantities of familiar objects-baskets, boxes, knitted socks and vests, and outer garments for dolls, and, abore all, flowers formed by the supple hands of children from paper, tinsel cord, beads, etc. The work is interspersed with songs, and with plays in the open yard or in the covered court, and there are daily baths and lunch, in which the larger children help the smaller as they would at home. The stories and songs relate to familiar experiences, and the teachers are very ingenious in inventing material to interest the children in common things. One, for instance, showed the story of a baker skillfully cut out in black silhouette to be used as the basis of talks about making and buying bread. This is all very different from the principle of development as applied in the kindergarten. Instead of Frebel's idea of growth through ethical and æesthetic activities it is Pestalozzi's gospel of education, "the saving of people," as he said, "by an education which combines manual work with the acquisition of elementary knowledge."

This idea prevailed in nearly all the infant schools of Europe represented in the Exposition. In those of Italy, which were the distinguishing feature of her exhibit in Class I, the amount of work seemed excessive. Hungary, on the contrary, showed a fine example of an infant school in which ample scope is given to the play instinct of childhood, but even here there was no relation between the activities fostered and a principle of spiritual growth as applied in the kindergarten. The French jurors recognized the distinction very clearly, and M. Bayet, the director of primary education, ordered a special investigation of this portion of our own exhibit with a view to practical modifications of the infant schools of France. These infant schools are really an integral part of the system of primary education, which is distinguished from the culture system comprised in the secondary and superior institutions by a pervading spirit of practical utility. Something of this distinction was noticeable in all the European systems of education represented in the Exposition, but nowhere else was it so marked. In the Scandinavian countries, for example, industrial training is an important feature of the primary schools, but there is no lard and fast line between these and the higher institutions. On the other hand, southern Europe offers no example of a nation in which the education of the common people is sufficiently advanced or organized to constitute a system.

The expression "primary education," as applied in France, embraces a whole scheme of education in which the animating principle is that of adjustment to environment. It makes no provision for that detachment from the immediate surroundings which is the essence of intellectual freedom; hence the elimination of the classics from the entire programme, even from that of the normal schools. But while thus limited in its ideal scope, this primary system aims at the highest possible development of industrial skill, accompanied by the adequate knowledge of common affairs and a sense of social and political responsibility which conduces to good citizenship. These aims were stamped upon its material exhibit, which presented also with admirable fullness and clearness the methods by which they are realized.

In respect to mere appearance--the qualities that catch the eye-Great Britain presented the opposite extreme to France. To be appreciated at all, the material had to be studied. This was particularly true of the English division. The schools of Scotland are better organized than those of England, and the general conception of education approaches more nearly that which prevails in the United States. In England there is absence of system and a confusing variety of types and ideals which can be understood only as they are individually considered.

The distinguishing mark of our own system was the inherent principle of unity working onward and upward from the primary school to the university. In this respect the limitations of space had favored us. Forced to be typical instead of elaborate and to follow the French classification, our exhibit revealed very clearly the one
element common to all our State and city systems, and the one which most deeply impressed foreign observers. This common element is the conception of education as an integral process, the same in its elementary stages for all people and imparting to all like aspirations.

I dwell upon these salient features of national systems because they imparted the chief lessons of the Exposition and affected the judgments of the jury much more than the details of school work which formed the great bulk of the material presented for examination. It must not be supposed that this work was neglected, but for obvious reasons it could only influence the jury as an index of the force of the respective systems. Each nation has purposes and conditions peculiar to itself, and its school methods are to be judged in relation to these rather than by comparison with those of other nations. With this understanding of the attitude of the jury, it will be interesting to consider briefly certain educational methods and results as they appeared to the jury.
In French teaching great stress is placed upon method. This was shown by the innumerable theses sent by the normal schools and by primary school-teachers discussing and illustrating the mode of unfolding a proposition or a lesson.
The general notion of method is impressed upon the normal students by the very nature of their own instruction. Their teachers are specialists who have mastered their subjects and have the French genius for formal and lucid presentation. The normal students imitate these living models and from them the notion of form passes on to the children in the primary schools. The stress upon method was particularly shown in arithmetic exercises; even in the case of the simplest questions a triple presentation was the rule, namely, the operation, its verbal description, and the analysis of the problem. This drill in exact statement and logical analysis gives a grasp of mathematical relations which makes progress easy and rapid. The use of the metric system also greatly simplifies this branch for the French child. In the third division of the primary schools (for pupils of 11 to 13 years) difficult problems in percentage were set forth with admirable clearness.
It was apparent also that certain principles of education had been seized by the teachers both in their essence and their applications. Thus the lessons in geography and the grammatical exercises afforded admirable examples of procedure from the known to the unknown, from the familiar to the remote.
In geography the French teacher begins generally by imparting notions and terms peculiar to the subject, as the points of the compass, the distinctions and familiar aspects of land and water, the shape and motion of the earth. After these are mastered comes representative geography or map drawing. This starts with the plan of the schoolroom, which is followed by maps of the neighborhood or the commune; if possible the process is extended to wider areas. The limits of this personal observation are, however, soon reached, and assigned lessons become necessary, and memory or copied maps take the place of original maps. From a casual survey of the exercises shown it seemed that too much attention is given to France and to surface aspects of the earth. Observation appears to be cultivated at the expense of imagination and local details suffered to obscure the higher conception of the universal life of the world and the great causal processes which explain surface appearances. It is certain, however, that the attention of pupils is called to these formative forces in connection with particular localities, and underlying the whole work is the belief that the mind is thus habituated to inductive reasoning, and that along with the habit of close observation there is developing the instinctive search for cause.

In the teaching of the mother tongue and its literature the French schools achieve :.emarkable results, and this fact gives special value to the judgment of a body of French experts such as were assembled in the jury of Class I, with respect to the corresponding results in other countries.

In France the native language is taught with the same methodical system as other
branches; short dictation exercises are daily given in all elasses, and although the use of a text-book in grammar is prohibited before the third stage of the primary schools, all the parts of speech and their inflections, together with the elements of syntax, are orally taught in the lower stages. The lessons are short and admirably graded and are reproduced verbatim by the children in their "cahiers," accompanied by practical examples, showing at once how well they have been comprehended.

Our own class books were eagerly scanned for exercises of this kind and their absence in some cases surprised our foreign critics. They believe that early familiarity with the principles of grammar is a help in the acquisition of other languages, an opinion that seems to be confirmed by the ease with which their young people acquire a second language when they pass to the higher primary schools.

On the other hand, there was a naïve freedom about the compositions shown from our lower grades that charmed our French critics. It was fascinating to watch the effect of some of the childish essays on a learned editor or even a philologist like M. Leger, of the College de France, who turned the artless effusions into French for a group of eager listeners. Everywhere they felt the child's personality in his work. The language exercises of the English elementary schools were inferior as a rule both to our own and to those of the French schools. "In the English schools," said one of the French experts, "children read, but they are not obliged to study grammar, and composition is a rare exercise." Scotland, however, showed some excellent language work, and one often cane across very piquant remarks in the compositions of Scotch children-as, for instance, "Scotland, as everybody knows, is the most civilized country in the world," which was offset by the statement of a French boy to the effect that "the English language is inferior to the French, but it is very important, for business reasons, to learn it."

Our work in elementary science ranked very high, and nothing in our exhibit was more appreciated by the French experts than the photographs and prepared work from the Oswego and the Philadelphia normal schools showing the manner in which our best teachers are trained to deal with subjects in natural history, botany, physics, etc.

England also exhibited some very fine science work, especially in mechanics. The illustrating diagrams were generally drawn on a large scale and distinctly lettered, and the explanations were clear and precise, but entirely free from mere bookishness. Excellent work of this kind by boys 12 to 15 years of age was shown in the collections from the higher grade schools of London, Sheffield, and other cities. It belonged really, like the algebra and geometry from the same schools, in Class II (secondary schools), where our high-school exhibits were found.

The jury also placed high value on the English work in domestic science. The instruction seems to be well systematized and entirely practical, and the work shown was not surpassed even by that from Stockholm and Christiania, where domestic arts rank with the three R's in the elementary curriculum.

In their discussions of school work the French distinguished carefully between instruction and education. Although the two ideas are inseparable in practice, the latter appears more clearly as purpose when the teaching deals with subjects which may be classed as ethical or æsthetic. To the former belong history and civics an morals, which has been brought into close relation with the two former by conditions peculiar to France.

The French revolution made a complete break with the past; the new political order arose out of ruins, and the Government has now to create the sentiments of loyalty and devotion which in other countries are hereditary. This charge is intrusted to the teachers of the primary schools; they are trained for this purpose, and they give themselves to it with passionate ardor. Under these circumstances, history, civics, and morals have become the center of the French programmes used consci-
ously and purposely as the means of developing the particular type of character which is presumably most serviceable to the Republic.
The neglect of history in English schools astounded our French colleagues, and even our own schools were regarded by them as somewhat deficient in this respect. On the other hand, they noted with interest the great extent to which historical stories figured in our composition exercises. There was little evidence in the French "cahiers" of that disinterested study of history whose purpose, as well defined by a French writer, is that of "developing the mind by habituating it to reason. to compare, and to judge."

The formal lessons in civics with which the French books abounded seem to the American of little value as a means of awakening the civic consciousness, but in respect to instruction in social duties growing out of the complex relations of modern life the French teaching offers valuable hints.
The recent impulse toward moral instruction in France has something of the fervor of the Protestant reformation, if one can imagine a likeness to that movement where religion is omitted. The subject not only has its own set treatment, but it is involved with every other subject--even problems of arithmetic turn on moral notions, as the abuse of tobacco or the importance of thrift. A moral maxim starts the exercises of the school day, and teachers vie with each other in inventing novel devices for establishing moral habits in their pupils. From one school was shown a sort of diary in which the teacher had recounted the good and bad acts of the pupils; in another case the children had made notes on the school day, with reflections upon the conduct of their mates.

Even such episodes are saved from priggishness by the French vivacity and quick response to sentiment. With us this didactic and personal treatment of morals would easily degenerate into an empty form. On the other hand the free spirit of our school life and instruction makes it easier for us to excite the social sympathies and the abstract sense of right and justice which are the natural incentives to moral action.
To the Americans the greatest surprise of their educational exhibit was the success of the art work. Its true significance was readily seized by the French experts, who saw in it not simply exercises with the pencil or brush, but, as one said, "a veritable training in æsthetics." The recognition is the more valuable because it was accompanied with much criticism of details and at the same time with a clear perception of the difierence between our own country and France in respect to art development. The feeling for art, the comprehension of its language, which our teachers have to impart, are innate in the French child. Forms of beauty hallowed by noble or by pious associations meet him on every side, and he copies them with a joyous sense of their inner meaning. This innate feeling explains in some measure, at least, the universal excellence of the drawing executed by French pupils. It explains also the ease with which industrial art, based upon geometric principles, is conducted independently of free-hand drawing and the general study of art without the loss of æsthetic effect.
The appreciation of our own art work on the part of the French was enhanced also by the value which they placed upon the corresponding work from the schools of Great Britain, where there is noticeable a general movement toward the study and free delineation of natural forms.
The award of a grand prize for the system of art instruction in the United States was a unique sign of approval, the only other similar award-that is, for the treatment of a single branch throughout the schools of a nation-being a grand prize for the French system of moral instruction.

It will be readily understood that the exercises of French pupils made a more complete revelation of the school work of France than the corresponding exercises from other countries. This was inevitable by reason of space allotments and the
difficulties of transportation. It was due also in part to the methodical processes of French teachers, the imitative tendencies of the children, and the fact that every lesson is entered in the "cahier," either in extenso or in an abridged form.

It was much more difficult to get an idea of English teaching from the pupils' work, but, as I have said elsewhere, ${ }^{1}$ all of it bore one unmistakable stamp-in English training the stress falls upon the will.
"In looking over the French 'cahiers' one was struck with the effort of the child to reproduce accurately and systematically something that he had received from his teacher. From the English books, on the contrary, one felt the effort of the pupil to attain an end. Sometimes it was a blind effort, sometimes it was evident that the unity of the process liad been grasped from the first and each step taken with the consciousness of relation to what had gone before. When work is done in this way, it shows not only an affort of will but a power of abstraction which is one of the best results of mental training."
"The school work by which we were represented at Paris was strikingly unlike that of the two rival systems. It lacked the methodical uniformity of the French work, and it had not the sign of stress on the will which marked the English. Two very novel features were, however, impressed upon our work that were not seen elsewhere, and that excited the liveliest interest. It revealed a principle of its own, which may be called the principle of free activity. This principle was stamped particularly upon the work of the lower grades, from which it really appeared that this most capricious element of human nature had been made to bear a part in formal training. It did not appear, however, that the principle had been consistently maintained or forcefully applied in the intermediate or grammar grades, and our work here seemed feeble and diffuse as compared with foreign work of the same grade. The inferiority was not marked, but it was recognized. Undoubtedly it was due in some measure to the fact that the best side of the work could not be presented. It comes out in viva voce recitations, whose influence at this stage of education reaches far beyond that of any written exercise and manifests itself in powers that are perhaps never traced to their true source."
The second feature of our school work that excited universal interest was that of correlation. Both the uses and the abuses of this principle were clearly indicated by the display-its uses as a means of correcting the extreme of mechanical formality, its abuses in the dissipation of energy through concern for artificial relations, and the inhibition of the deeper reflections which lead the mind to the underlying principle of things.

Apart from these great lessons of the exhibits as to the spirit and methods of popular education in different nations, there were many minor features that well deserve attention. Among these should be noted the use of graphics and statistics for showing progress and relative conditions.

Statistical charts were the chief feature of the exhibit made by Japan, whose director very justly observed that pupils' evercises from his country would be meaningless without "sinologues" to interpret them. From the statistics it appeared that the total number of elementary schools in the Empire in 1899 was 28,421 , viz, 25,799 public, 1,600 private, and 22 State schools. They emrolled $4,247,341$ pupils and employed 92,963 teachers. The rate of increase since 1886 has been, for schools, 10 per cent; pupils, 40 per cent, and teachers, 17 per cent.

A unique chart exhibited by Japan showed the correlation of all classes of schools, and the number of pupils advanced from each grade to the next higher, and the age at promotion. One could trace on this the whole progress of a scholar from the infant school to the university.

The value of statistics as a corrective of the exaggerated impressions derived from

[^83]photographs was illustrated by the exhibit of Russia. The tables, compiled with great care and with an evident sincerity, showed, in that vast Empire, only 4,303,246 children enrolled in school in 1899.

The meagerness of the school provision is apparent. With the present population there should be at least $20,000,000$ children in school. The tabulation was made by provinces and showed considerable increase in each division since 1889. This particular, thus happily emphasized, afforded a ground for the relatively high proportion of awards accorded to Russia, where popular education is in a feeble state. Finland, it should be said, presented a remarkable contrast to the rest of the Russian Empire. The exhibit from this grand duchy was one of the gems of the Exposition. It represented a system complete, from the infant school to the university, admirable in all its operations and liberally supported, the pride and the glory of the people.

Private efforts for the increase of educational facilities or for the aid of poor children, in order that they may benefit by school instruction, formed a feature of many exhibits. In this category belongs the society for promoting popular education founded at Kharkof, Russia, by Mme. Altchevski, and supported by private benevolence. This society, whose work has spread to the chief cities of Russia, maintains Sunday schools where poor young women are taught to read and write and acquire general ideas of morals, nature knowledge, history, and geography. The society also establishes libraries for the circulation of suitable books among the poor.

In the same class belong the exhibits of the infant schools of Italy, maintained by private societies. An invariable and admirable feature of these schools is the "garden," in which, judging from the photographs, the children really play without restraint.
Among the efforts for promoting the physical welfare of school children are school dinners and school lunches supplied at a mere nominal cost or gratis, if necessary. This provision was shown particularly in connection with the primary schools of Paris, Brussels, Christiania, London, and Manchester by photographs and by charts indicating the progress of the charitable efforts.

School baths are maintained in many foreign cities, and formed a very noticeable feature of the exhibits of Stockholm and Christiania. The sense of public responsibility which has led to the establishment of schools for the blind and the deaf and dumb in nearly all countries is extending to other cases of defective children, such as the feeble-minded and imbecile. London seems to lead in this work, the school board having under its charge 52 special schools for defective and epileptic children with accommodation for 2,460 of these unfortunates. In Norway a government director is appointed for the general conduct of a similar work which in that country is of national extent.

Vacation schools are coming to be everywhere recognized as an indispensable adjunct to city school systems. Our own country seems to lead in this provision, and the most effective exhibit of schools of this class was that of New York City.

These special adjustments of public school systems and the cooperation of private with public agencies for the assistance of needy children belong to the deeper social problems of the day which were brought into special prominence in the section of social economy and the allied congresses of the Exposition. Everywhere it was recognized that the problems of social reform, of the repression of crime, of the prevention of want, are largely problems of education. The idea was emphasized also in the elaborate display of colonial life by the care taken to set forth the efforts pertaining to race education.

The division of colonies included the provinces of Ontario, whose school system attracted great attention, and Quebec, whose system showed marked resemblances to that of France, but race education had no special part in these. It was in the French colonies that this feature was made prominent, and especially in the exhibit from Algiers.

The location and classification of schools was shown by means of colored maps, and the progress of the educational work by charts of comparative statistics. Individual schools and colleges were represented by fine photographs and art schools by paintings evincing much native talent. Model school buildings, set off with native scenery, gave a realistic touch to the whole presentation.

One of the most interesting sessions of the jury of Class I took place in the Algerian pavilion when M. Bayet, formerly inspector of the Academy of Algiers, portrayed in vivid terms the spirit and progress of the new order of things amid this mixed population.

In the French colonies of Africa and the more remote possession of Indo-China the religious associations are especially active. The interest of the French Government in colonial development was significantly manifested by the proposition, carried in the jury by French votes, to consider separately the colonial work of the Christian Brothers, with the result that this received a higher award than their home work. In respect to the matter of race education the United States offered the widest experience, covering work with the Indian, the African, the Alaskan, and with a peculiar mixture of races in Hawaii. Everything bearing upon this experience was examined with intense interest, and the award of a grand prize to the exhibit of Indian education and to the American negro exhibit attested not only the excellence of these exhibits but their value as object lessons.

The attention of the jury on primary education was occupied chiefly with the particulars here considered, namely, the organization of systems, the conduct of studies and discipline, and the means of developing defective children and inferior races.

But there are other lessons of an exhibit like that at Paris which are not less impressive, even if less easily estimated. With all their differences, the great nations of the earth are moved by many common impulses, and these world movements were very distinctly marked in the educational exhibits.
The school appliances, the written exercises, the photographs shown at Paris, made it evident that everywhere physical training, nature study, artistic expression, and manual aptitude have become integral parts of public education. To sum up, in a word, everywhere there is reaction against mere bookishness.

Everywhere, also, the special problems of rural education are emphasized, in particular agricultural training or the impartation of the sciences and the technical knowledge that pertain to rural industries. Although France made a much more striking exhibition under this head than our own country it does not appear that its actual achievements in this respect are greater.
The elementary stages of the instruction are still lacking in practical features, and this defect explains the efforts to interest visiting teachers in the exhibit of a model school garden arranged under the immediate direction of the inspector-general of manual training.

Everywhere, also, the importance of professional training for teachers is recognized. France has found the way to extend such training to all her teachers, and the day seems not far distant when this policy will be as universal as education itself.
It is scarcely an exaggeration to say that the Exposition was also prophetic, since in various but unmistakable ways it indicated the problems whose solution can not be long deferred.
In England the problem of the hour is that of the correlation of existing schools with a view to economy of resources and larger results. The necessity is typified by a diagram here reproduced, which shows at a glance the state of the problem in the city of Manchester.
In France there are signs that the dual system of education, viz, primary and industrial for the people and liberal for the higher classes, can not long remain without organic unity. Already the influence of the primary system, on which the

Republic has concentrated its best efforts, has penetrated the traditional culture schools. This was apparent from their exhibits of art, of manual work, and of science lessons. The spirit of modern industry is forcing a change which commission after commission has vainly sought to avert or to control.

DIAGRAM ILLUSTRATING THE CORRELATION OF EDUCATION IN THE CITY OF MANCHESTER.


Reproduced from Nature, January 31, 1901.
The United States is committed to general education in a large sense of the term as a preliminary to special or technical training. It advocates this on grounds that appeal to all men everywhere who believe in democratic government. This country stands also for freedom, flexibility, spontaneity in school work. It remains to show that it can maintain these ideals without prejudice to those positive attainments or the sacrifice of that intellectual discirline which are necessary equipments for the serious affairs of life. But it is unnecessary for me to dwell upon our exhibit. What
it stood for in Paris and the deep impression which it left are sufficiently shown by appended extracts from foreign sources.

For a better understanding of the jury and its work, the account of the jury of Class I is here cited, from the report of the Commissioner-General of the United States to the Paris Exposition.
The bracketed matter has been inserted from another report by the same author to Mrs. Potter Palmer, commissioner for the United States to the Paris Exposition. lt was owing chiefly to the judicious efforts and the personal influence of Mrs. Palmer that women were admitted to responsible positions in connection with the Paris Exposition. It was the first time such a proposition had been seriously entertained in connection with an internationai exposition held in Europe, and the French Government did not favor the innovation at the outset; but the proposition once accepted, every facility was extended to the women who received appointments.

It should be explained that the jury was organized in classes and groups, following the divisions of the Exposition. Above these class and group juries was the superior jury, which was the tribunal by which the awards for every class of exhibits were finally determined.

A class jury was composed of experts or specialists in the particular material of this class.

The officers of the several class juries were the members of the group jury, which comprised also other members appointed by the minister of commerce, industry, posts, and telegraphs upon the nomination of the Commissioner-General, with the concurrence of the Directors-General of the Exposition.

A special decree determined the composition of the superior jury. ${ }^{1}$
REPORT OF JUROR IN ELEMENTARY EDUCATION.
Class I, Group 1, Paris Exposition.
Hon. Ferdinand W. Peck,
Commissioner-General for the Thited States to the Paris Exposition, 1500.
Sir: I arrived in Paris May 21, and thus had the advantage of attending the first general meeting of the American jurors, held in the United States pavilion the morning of May 23 , when Prof. J. H. Gore, the juror in chief, outlined in a general way the duties and responsibilities of the work. On the afternoon of the same day I was present at the public inauguration of the jury service, which took place in the grand hall of the Trocadéro.

Preliminary stages of jury service.-M. Millerand, minister of commerce, under whose auspices the exposition was organized, presided over this meeting, and in an impressive address sketched the progress and scope of the collections upon which the several juries were called to exercise their expert judgment.

The organization of the class juries was effected the following Saturday, May 26, and, as the jury of elementary education, Class I, Group 1, was the first in order, I had the distinction of being the first American to go into conference with our foreign colleagues. There were present also on this occasion the juror from Hungary, M. Bela Ujváry, and eleven French jurors.

The jury organized by electing officers, the nominations having evidently been carefully determined beforehand. This was a necessary precaution in a country where, as in France, elementary education is closely bound up with national politics and under circumstances also affecting delicate international relations. The importance of this class jury was emphasized by the choice for president of M. Bourgeois, who was also appointed president of the superior jury. He is a well-known diplomat, who represented France at the Hague conference, and who has filled the office of minister of public instruction at critical periods in the recent history of the Republic. For reporter of the jury the choice was M. René Leblanc, inspector-general of primary

[^84]instruction and an authority on manual training, and for secretary, M. Just Baudrillard, inspector of primary instruction for the Department of the Seine.

In accordance with the rule that the president and vice-president must be of different nationalities, the second position was reserved for the English juror. Mr. Brereton was late in arriving, but proved a most valuable addition to the official corps.

Among the French members were included also M. Ferdinand Buisson, who was for twenty years at the head of primary instruction in France and who at present holds the chair of pedagogy at the Sorbonne; M. Bayet, the successor of Mi. Buisson in the ministry, and M. Jost, inspector-general of primary instruction and editor of a most valuable educational year-book.
[When complete the jury numbered fourteen French members and nine representatives of foreign countries, of whom one, M. Mi. Collière, was a Frenchman charged with the interests of the South African Republic. Russia had two jurors, being the only foreign country that had more than one representative in this class. One of the two, M. Kovalevsky, is well-known in the United States, having represented his country at the Chicago Exposition. Mme. Chegaray, directress of a high school in Paris (école primaire supérieure) was the only woman member besides myself.] ${ }^{1}$

All the members, French and foreign, were specialists. In respect to the union of expert knowledge with philosophic breadth, the jury on elementary education was indeed an ideal body.
Scope of the work in Class I.-The subject with which this jury had to deal presented many difficulties by reason both of its nature and vast extent. It comprised about 4,500 separate entries, 4,115 for France alone, including its colonies, and 433 for foreign countries. These separate entries or exhibits were for the most part collections, so that the single or particular objects should be estimated at many times the totais given. The exhibitors were the education departments of nations, states, cities, and other units of administration, corporate bodies, private firms, and individuals.

It was evident that the jury acting as a whole would be unable to examine this vast and varied collection within any reasonable time, and it was therefore decided at the second meeting, which took place May 30, to organize the body in four subjuries. Following the French classification, these subjuries were assigned respectively to elementary primary schools (including kindergartens or infant schools), superior primary schools (a grade below our high schools in standard, and having extended courses of industrial training), manual training, and normal schools. For convenience the subjuries were designated as first, second, third, and fourth. The practical work of the first subjury, in which I had chosen to be enrolled, began Thursday morning, May 31. The president of this division was M. Ferdinand Buisson, and in his absence, which was not unusual, on account of official engagements, his place was usually taken by M. Bayet.

Even with this subdivision of labor it was impossible that the material, at least the French material, could be examined by the jury in the time allowed, and hence a number of experts were called to examine certain of the collections in detail and report the results to the respective subjuries.

Procedure of the jury.-The organization completed, the jurors entered at once upon their practical duties. The examination of material went on almost daily, Sundays excepted, from May 31 to August 9, a little less than two months and a half. It was arranged at the outset that each subjury should meet three times a week for conference, and the full jury once a week, and this plan was adhered to so far as circumstances permitted.

Subjury 1 began its examinations with the independent exhibits in the French section, which engaged attention continuously until June 26. During this time the conferences, whether of the sub or the full jury, related exclusively to details of French education, and it soon became evident that for French public schools the work was to be of the nature of a government examination, in which the merits of each exhibition were to be tested by official requirements not applicable to foreign countries.

Claims of foreign exhibits.-As week after week passed there seemed reason to fear that delay in entering upon the foreign sections might prove prejudicial to their interests.
The subject was canvassed in the full jury, and with the candor that marked all

[^85]their proceedings the French agreed that work should be commenced at once on the foreign exhibits. The foreign delegates were unanimous in the opinion that the classification of the French schools, which had determined that of the subjuries, could not be applied to foreign countries. To this view the French members also assented, with the result that a fifth subjury was formed for the consideration of the foreign exhibits. This jury comprised all the foreign members and about two-thirds of the French members.

Methods and policies of subjury on foreign exhibits.-It was impossible to outline exactly at the outset the principles that should guide this subjury in its judgments. Education belongs to the spiritual forces that control human activity and can not be measured like commercial products by exact and uniform standards. Its values are always to be relatively determined, and to judge of it fairly one must not only examine the reports and the tangible products of its operation at a given time and place, but must also know its history in the country considered and its progress there as compared with the progress in other countries.

The method of the jury in respect to the foreign exhibits was the same as in respect to that of France; it consisted in the careful examination of the material, conference as to its merits, and a conclusion summed up in the rote of the suljury and revised in the full jury. As the examination and conferences went on, certain principles of judgment were evolved which may be said to have a universal application, because they received the approval of specialists from many countries. For example, it was recognized that to be worthy of the highest award an exhibit should be complete and typical and of high educational merit.

The exhibit of an educational system was regarded as complete if it comprised photographs showing school buildings, both exterior and interior, pupils' work in all departments, official programmes, inquiry forms, etc., indicating the nature and methods of the administration, and reports and statistics setting forth results.

The exhibits of many national, State, and city school systems were complete in this respect. In the case of subordinate administrations-that is, cities or districtsthe extent of territory and the nature of the population to be dealt with were also considered in deciding the award.

The work of this fifth subjury comprised altogether exhibits from twenty-three countries, of which eight only had jurors. The claims of the remainder were presented by their commissioners, and they relied for the result upon the fairness of the jury, a confidence which was certainly not misplaced. The entire jury was mindful of the interests of the unrepresented countries, but the chief responsibility in each case rested with the member most familiar with the particular country considered.

The right of appeal to the higher juries gave ample security against mistaken or partial judgments, as was illustrated happily in the case of Ontario. Through a misunderstanding the admirable school system of this province was not adequately presented to the elementary jury. Convinced that some mistake had been made, the American juror protested against the decision then reached. At the instance of the Ontario authorities Mr. Brereton was subsequently authorized to reopen the case in the superior jury. He consulted the American juror (class 1) as to the history and importance of the system, and thus fortified carried the case to successful issue, securing the just award of a grand prize.

The conferences of the jury in cases of wide disagreement were the most interesting features of the work. They were conducted often with much heat, but always with the greatest courtesy and with an ever-increasing understanding on the part of the participants of the value of different systems of education.

The work in the foreign sections continued until July 14, after which date attention was again concentrated upon the French exhibits.

Individual exhibits.-The section of elementary education included, besides the exhibits of educational systems and of schools, exhibits by individuals, publishing firms, and manufacturers of school furniture and material.

Great interest was shown in the educational journals of the United States because of their entire freedom from any touch of official repression or supervision. Only journals having an international reputation secured the distinction of a gold medal. Among these were the Educational Review (New York) and the New England Journal of Education (Boston). The set of nineteen monographs on education in the United States contributed to the Exposition by New York received high recognition. They were prepared by distinguished specialists and edited by Dr. Nicholas Murray Butler, of Columbia University.

Franceshowed many devices and educational methods, outline lessons by teachers and discussions of principles. Very few received more than honorable mention, and this was only allowed for unusual merit. In case of apparatus and appliances, it was required that they should contain an original element, that they should be simple in construction and of practical utility.

The United States contributed three important exhibits of this kind, namely, kindergarten material from the Milton Bradley Company, the Perry pictures for school use, and the art publications of the Prang Educational Company. These fulfilled all the conditions requisite for a high award and received each a gold medal.

In general, there was a manifest reluctance on the part of the jury of class 1 to award a grand prize to any exhibit into which the commercial element entered. The exception made in the case of the American Book Company is therefore a high testimonial to the excellence of their elementary text-books.

General observations.-The exhibit of the French ministry of public instruction in the section of letters, science, and arts, combined with that of the city of Paris in the beautiful pavilion of the same name, was probably the most elaborate exhibit of the kind ever displayed. It was, however, perfectly classified, and in spite of the repetition of details, wonderfully effective to the eye. This grand collection, as I have indicated, was the subject of official examination in regard to particulars which no foreigner could properly estimate, but it was judged on an international basis with reference to the features common to all systems, such as the magnitude and scope of the work, administrative and educational methods, results as shown by statistics and pupils' work, etc. In respect to these the French members modestly awaited the propositions of their foreign colleagues, who showed on their part full appreciation of the very high merit of this exhibit.
The examinations of the jury, everywhere critical and thorough, were particularly so in the United States section, because of the unusual interest it excited. Great credit is due to the director, Mr. Howard J. Rogers, for the admirable arrangement of the material. It was attractive to the eye, well classified, and easily accessible in every part. In these respects the exhibit received, as it deserved, high praise from the French themselres-the masters of the art of effective display.
The material sent by exhibiting States and cities was in the main well selected and made it possible to present very fully, in a limited space, the scope and spirit of the public-school work of the country. Photographs were freely used in all the sections, but in none was their value for exhibition purposes more decisively shown than in the American. The winged frames also proved a practicable means of utilizing wall space and at the same time of bringing salient features of school life and work under easy notice. Indeed, the great lesson of our exhibit was the possibility of making a collection of material complete without endless repetitions. In an educational exhibit the worthier end would seem to be instruction rather than competition, and if this idea prevails henceforth the use of photography, statistics, and graphics will be proportionately extended, thereby facilitating the comparative study of different systems.

The inquiry blank sent by Director Rogers to all exhibitors, when filled out, was a complete index to the accompanying material. A few exhibitors failed to supply the items, to the great detriment of their material. In a few instances a French version was added and was greatly appreciated. The general omission of explanations in the one language universally known abroad was regretted, but the defect was partially remedied by a brief index in French attached by the director to all album exhibits.
The graded system of awards adopted by the French, which reserves a high prize for those who have taken the lower degrees at previous expositions, was generally enforced in the case of individual exhibitions, but obviously could not be strictly applied to nations, states, cities, etc. The system of numerical marking, under which the final judgment is expressed in the average of marks given by the individual jurors, is also specially objectionable in the endeavor to estimate a spiritual force like education. In the case of the jury of class 1 the evils of this system were obviated by free and open discussions. Where opinions clashed greatly, the marks were taken by private ballot and averaged by the president.

Close of the work of the class jury and relations with the group and superior juries.-The service of the class jury in elementary education was of longer duration than that of any class jury, and its work continued after the call of the group jury the last week in July. Its responsibilities did not cease even with the submission of the report to the superior jury. Although only officers of the class jury were entitled to membership in the group, our entire class jury was called in conference with this tribunal, so that there was full opportunity to protect the awards voted in the class jury. I had no occasion to avail myself of this privilege, as the votes of the elementary jury in respect to the exhibits from the United States passed in the group jury without challenge.

As a result of the decisions of the class jury, confirmed also by the group and the superior juries, the United States received for its exhibits in elementary education 12 grand prizes, 25 gold medals, 8 silver medals, 3 bronze medals, 2 honorable mentions; also for collaborators, 4 gold medals and 3 silver medals.

The work of the jury of class 1 , though long and arduous, was exceedingly interesting and instructive. It gave broader conceptions of the term "national education," and a profound sense of the influences which make for international unity. On the social side nothing was omitted that hospitality or courtesy could suggest to make the service a delightful remembrance to all participants.

To the members of the jury the most interesting social events were the banquets limited to their own circle. The French members of the entire educational group gave a banquet (déjeuner) in honor of their foreign colleagues July 3, the company including 83 men and 6 women. The latter were represented in the toasts by Mlle. Dugard, of the jury on secondary education (class 2), who, foliowing distinguished representatives of the great powers and of the smaller nations, happily invoked the spirit of unity among all the nations.

The members of the jury of class 1 entertained each other at a delightful déjeuner August 2, at which the president, M. Bourgeois, presided. The most cordial spirit prevailed, and the toasts reflected the truly fraternal sentiments that the associations of the summer had awakened. It was determined on that occasion to form an international union for the purpose of fostering friendly relations and the interchange of information among the school people of the several nations represented.

Anna Tolman Smith.

## APPENDED PAPERS.

## THE PARIS EXPOSITION-EDUCATIONAL ASPECTS. ${ }^{1}$

[By Howard J. Rogers, Director of Education and Social Economy for the Commissioner-General of the United States.]
The Paris Exposition of 1900 is the compendium of the world's education. The motive of the Exposition is not commercial; it is not scientific nor artistic. It is more than either. It is the summing up at the close of the nineteenth century of the world's experience. The careful grouning of exhibits, showing not only the present excellence which each science, art, or industry has reached, but also a retrospective view of the historical development of each subject, bears out this interpretation.

Americans are fond of comparing the present Exposition with Chicago in 1893. There is no comparison in reality. As an architectural and landscape-gardening proposition, Chicago is unexcelled. It is difficult to conceive a combination of circumstances so fortuitous as to enable the present generation to surpass it. As an exposition of exhibits arranged scientifically and adorned by the highest skill in decorative art, Paris is unapproached.

It is natural, therefore, to find in an exposition of this character that educestion is given the place of honor in the official classification. In the language of Commis-sioner-General Picard: "Education and instruction are first in the list, because through them man enters into life. They are also the source of all progress."

It is interesting to Americans, and particularly pleasing to American men of letters, to note the deference paid to the professions of letters and arts in France. In the United States the commercial spirit is still so strong within us that the deroting of a life's work to teaching or to the arts is yet looked upon askance, or, at best, with a patient tolerance. The old idea that a boy, if he is not keen enough to make a good lawyer or shrewd enough to make a good trader, will still do to teach or to preach, has many believers. But "they order these things differently in France,", and the social and political aspirations of a person are strengthened by his prominence in the educational or artistic world. The minister of public instruction and beaux-arts is one of the three most powerful ministers in the French Cabinet, controlling not only the public schools, universities, and art schools, but also the opera, the national theaters, and the salons.

Correlative to this idea was the formation of the French section of the international jury of awards in class 1, elementary education. While all the juries of the six classes of Group I (education) were able and highly representative, that of class 1 was preeminent, not only in Group I, but in the entire eighteen groups of the Exposition. Among its members were two former ministers of public instruction, the director of primary instruction for France, a leading delegate to the International Peace Congress at The Hague, and prominent members of the Chamber of Deputies. An award granted by such a body of men has more than the ordinary

[^86]significance attached to exposition awards, as it represents the deliberate opinion of cultured, unbiased men of wide experience.
The educational exhibits are in the gallery of the Palace of Letters, Sciences, and Arts, on the west side of the Champ de Mars. The space as a whole is ample for the exploitation of the subject, but its subdivisions are inequitable. This is particularly true of the United States, which, as the recognized home of popular education, should have a space assigned to it second only to France. It is not entirely the fault of the French authorities that this was not done. Congress, by passing the law creating the present commission in 1898, accepted the invitation of the French Government to participate in the Exposition over a year later than the most tardy of the other great nations, and when our applications for space were filed, all other nations had received their assignments. Indeed, it was only by the courtesy of the French authorities, in reserving space for us pending our decision to participate, that our country was able to make so excellent a showing.
All of the great nations of the world are represented in the educational section except Germany. Many surmises have been made by others on their failure to exhibit. Two reasons are given by the Germans: First, lack of adequate space; second, lack of a purely national system. It may be remarked in passing that both of these excuses might have been advanced with equal force by the United States. The absence of Germany in Group I is to be regretted.

Were the question asked, What are the most prominent features or striking facts brought out in the educational exhibit of the Exposition? my answer would be: The wonderiul advance made in popular education during the last decade by Russia and Japan; the awakening of England; the manual-training craze of France and Austria, and the genuine surprise and pleasure in European circles at the systematic exhibit from the United States.
The first impression in visiting the Russian section is that Russia has made a tremendous effort to convince the world that she has a better system of public instruction than the world believes to be possible to exist there. But a more careful examination reveals the fact that, while the exhibits themselves are selected and fragmentary, they typify a material progress and illustrate an intensity of purpose worthy of admiration. Free education as we understand the term is still a long way from achievement in Russia, but it is a great step from the illiteracy which held in bondage 95 per cent of her population, to a school system which places in nearly every community free instruction in the common branches during three years, for six months each year. The figures drawn from the Russian graphic charts are particularly interesting. For example, the growth of primary instruction in the schools under the ministry of public instruction is illustrated by the fact that in 1882 there were $1,418,016$ pupils in attendance; in 1898 there were 2,650,058. These figures do not include the church schools, which number about one-third the total number of primary schools in Russia. The growth of free instruction in the rural districts is also notable.

This rapid growth is extremely interesting from a social as well as an educational standpoint. * * * To quote the words of a Russian attaché at the Exposition: "There is a most absorbing thirst for knowledge taking possession of our people; we need no compulsory laws when we have not school accommodations for those anxious to come and for those who would travel many versts at a great sacrifice if they might come."

The Russian educational exhibit received close attention from the juries of awards, and, next to the United States, obtained the highest number of awards for a foreign country. When some surprise was expressed to a prominent member of the group jury that a nation whose educational development was stili in an experimental stage should receive as many awards as a nation which stands foremost in free public education, the reply came that the two countries were judged on a different basis; that the awards to Russia were made for the sake of encouragement on the progress shown in the last eleven years, while those to the United States were made on a basis of absolute excellence. A truly diplomatic reply, which was perhaps but the echo of the policy pursued in a wider diplomatic field.

In Japan's exhibit we note a like rapidity in the development of school facilities, but with this distinction: it is the growth of a more thoroughly organized system, which its administrators and the public believe to be suited to their needs. A wonderfully clever people are the Japanese, quick to imitate and adapt; their manualtraining models show the delicate touches which are characteristic of the art of the nation; their technical schools turn out designs and products which indicate unmistakably the coming prominence of Japan as an industrial and art manufacturing center. No fact, I believe, has been more clearly demonstrated in the Exposition
or driven home to Western nations more forcibly, both to manufacturers and scientists, than that Japan, with its rapidly developing technical and artistic skill, combined with its cheap labor, will soon be able to bring to the Enropean and American markets superior products at lower prices. Some idea of the growth of the elementary education which forms the basis of Japanese technical courses can be obtained from the following figures, drawn from wall charts exhibited: The number of pupils attending primary schools in 1880 was, girls, 800,000 ; boys, $1,400,000$; in 1898, girls, $1,500,000 ;$ boys, $2,650,000$. In 1893, of all pupils of elementary school age, 68.9 per cent were enrolled in the public schools.
In 1888 the Government expended on elementary education 8,175,000 yen; in 1897, $18,650,000$ yen. The Japanese are great admirers of the educational system of the United States, and freely acknowledge their indebtedness to us for methods and inspiration.
An amusing incident was noted at the beginning of the Exposition, illustrative of unconccious American infuence. The entire educational exhibit of Japan was set up in a French exhibition labeled throughout in English. Somewhat later, supplementary French labels made their appearance.

For the first time in an international exposition, Great Britain has made an educational exhibit. In Chicago, in 1893, the London school board had an exhibit, but at Paris all England is represented through it various school boards, its public schools, and its universities; Scotland is represented by its universities and its public free schools; Wales by its technical and trade schools. The exhibits of the universities of Oxford and Cambridge are particularly interesting, not only from the wealth of historic matter and material progress which they portray, but also because it is their first appearance at a foreign international exposition. The public schools of Rugby, Eton, Winchester, and Harrow have, too, a special interest for every American.

But it is in the elementary and secondary sections of the free-school systems that our interest centers. The impression left upon the observer is, that there is force behind their methods-rugged force and determination. The exhibit is not well classified and interpreted, but this is the fault of the royal commission. The director of education for England has done magnificently with the funds placed at his disposal. The most satisfactory feature is the steady growth of the board schools established under the education act of 1870, the excellent nature of their work, and their rapid absorption of the territory occupied by denominational schools.

The denominational schools will, of course, never disappear, but as the controlling factor in the education of English youth they are doomed. It is, perhaps, a happy augury that their ascendency has been overthrown during the last year, and that the beginning of the new century will see the supremacy of the school system inaugurated in 1870. The following figures are for 1898: The attendance on primary instruction for England and Wales in the board schools was 2,087,519; in the British and foreign society schools, 230,355; total in free undenominational schools, 2,317,874. In the Wesleyan schools it was 124,971; in the national schools under the Established Church, 1,883,263; in the Roman Catholic schools, 246,128; total in free denominational schools, $2,254,362$. The work of the London school board needs no commentary here. It is well known to Americans through its demonstration in Chicago in 1893, and we note in Paris with equal satisfaction its progressive tendenciés. Birmingham, Leeds, Manchester, and Bristol present most attractive exhibits illustrating systematic and rational curriculums. As might be expected in manufacturing towns, the manual-training features are pushed to the front, and the technical schools of Birmingham, the Technical and Agricultural Institute at Manchester, and the Technical School of Art at Coventry, are examples of the initiative in this direction. It is hardly fair to compare their work with the long-established technical schools on the Continent, as precedents and conditions are so diverse. The purely industrial features of the work are strong and attractive; the artistic features are cramped and lack the freedom of original development and expression. But the seed is planted, and by the time the next international exposition is held England will show astoriishing results.

It is impossible to criticise in any one article our hosts, the French. They have taken unto themselves thousands of square feet of floor space; they have demonstrated amply and scientifically every phase of education in France; the preparations for the exhibit were begun during the year 1898, and it needs almost as many years as have elapsed since then to study it thoroughly. It is a wonderful exhibit, complete in details, worth careful study, tiresome only in its many repetitions. The minister of public instruction, M. Georges Leygues, and his directors have left nothing undone to present in the most attractive form the educational resources, methods, and practical results achieved in the schools and universities of France.

But there runs through the public school exhibit one predominant tendencytoward manual training. The same may be said of Hungary and other central European nations where the French infuence is felt. The tendency may be discussed from two standpoints: First, its intrinsic excellence; second, its effect upon the development of the nation. The first does not admit of argument. The system is beyond doubt brought to a higher state of perfection than in any other country. The delicacy of touch, the originality of design, is most admirable. In the écoles primaires supérieures, both for boys and girls, where the average ages of the pupils range from 12 on entering to 16 on graduation, the perfection of workmanship is in many cases equal to that of master workmen. In the school exhibit of the city of Paris, which has a separated place in the Ville de Paris building on the right bank of the Seine, is an exhibit of the Sophie-Germain School for girls in which the millinery and dressmaking would find a ready market on Fifth avenue. The culminating point of the techinal exhibit in this building is the Salon Central, furnished with exquisite taste and beauty, and on a richly carved table in the center rests a framed inscription, "This salon has been entirely furnished by the pupils of the municipal professional schools."
Do the needs of a nation justify this excessive specializing in the schools supported by public money? We have nothing in the United States to correspond with the école primaire supérieure; our nearest approach to it is the manual-training high school, which aims to train the senses in conjunction with the mind, but not to the exclusion of the humanities. There is certainly a radical difference underlying the theory of public education in the two Republics. Which will subserve better the destinies of the nations only experience can determine, but American educators will abide with equanimity the test. The needs of our nation certainly do not demand at present this highly specialized form of technical education. We prefer to train the citizen, not the artisan; to broaden the pupil and let him make his own choice in life, not to rum him through a groove. In the United States every boy between the ages of 5 and 18 is offered an education which may fit him to be the President of the Republic; in Europe he is educated in a shrinking fear that he may have political aspirations. It is a serious proposition to restrict in any manner the mentality of any class of people. Are we not justified in giving the broadest possible training and trusting to the judgment thus developed not only to select wisely the occupation of life but to attain the highest excellence therein?
The educational exhibit of the United States will have to be criticised by another pen than mine. It is permissible to state, however, that the plan of arrangement discussed in the Outlook in August, 1899, has been eminently successful and highly appreciated. It has been possible thereby to obtain without endless duplication an accurate knowledge of the public-school system in the United States, year by year, from the first primary to the end of the secondary course, and a clear view of the field covered by our colleges, universities, and professional schools. The classification by grades and departments has been rigidly followed, and localities and institutions made to conform to the object of the exhibit, viz, to answer in a concise manner the inquiry of any foreigner concerning any department of American education. It is the only educational exhibit at the Exposition thus systematized. The sincerest compliment which the United States exhibit has received lies in the fact that, after a preliminary examination by an expert, England, Sweden, Russia, and Austria have sent delegations of teachers at Government expense to study at length our system and its results. It has been a matter of some surprise to American visitors to learn that we have in truth a national system of education, when we have been popularly supposed to have as many systems as we have States. The advisory influence exercised by the Bureau of Education at Washington, and the function of the National Educational Association as a clearing house for educational ideas, was never more clearly illustrated than by the similarity of methods and work which are shown in the educational section of the Paris Exposition from the States of Massachusetts, New Yoris, Illinois, Missouri, Colorado, and California. * * *

By Gabriel Compayré, president of the council of the University of Lyon, officer of the Legion of Honor.
[From the Revue Pédagogique, No. 8, August 15, 1900.]
The Revue Pédagogique, in its account of education at the Exposition of 1889, expressed its regrets that the United States had not profited by that occasion to give their school system a prominent place. The truth is that eleven years ago the few articles placed on exhibition in the name of American schools, mingled with photographs in the section of industries, did not make a figure worthy of that great nation. This time the United States have their revenge. Nothing has been neglected which could give their school exhibit of 1900 the impressiveness which it merits.

To begin with, the space allotted to the American exhibit, although none too large, is not so confined as it was in 1889. The exhibit is quite coquettishly installed in five or six spacious alcoves, which are separated from the gallery in which they are situated by a light and graceful façade, designed by an American architect. Úpon the exterior panels of this façade are presented views of the Boston Institute of Technology, a veritable palace which, with its galleries and rich decorations, has the appearance of a theater or opera house. Two entrances give admission to the interior of the exhibit; that on the leit leads to the division of elementary schools, and that on the right to the university section. But the exhibit embraces all grades of instruction, and is divided into several distinct sections, wherein are classified in perfect system the things relating to (1) primary instruction; (2) secondary instruction (high schools, colleges, ${ }^{2}$ etc.) ; (3) technical instruction; (4) professional instruction; and (5) superior instruction (universities).
The organizers of the exhibit have made the most of the few square meters of space which was allotted to them, and have been most ingenious in arranging a great many things in a small compass. Around each room runs a shelf or ledge, beneath which are cases or open shelyes, containing easily accessible documents of interest, such as bound volumes of scholars' copy books, reports of boards of education, and of school superintendents and other administrative officers. Above the ledge are photograph albums, specimens of school work, drawings, programmes, and pamphlets; while above these again, upon the walls, are photographs, statistical tables showing the number of schools, teachers, and pupils, and maps, one of the latter showing, by the way, the two continents of Europe and Asia combined under the name "Eurasia"-in short, the collection contains everything which can be brought before the eye in school work. A clever means of increasing the surface for exhibiting their display which the Americans adopted is that of movable frames-" winged frames," as they are expressively called-arranged in such a way that some twenty pictures can be shut together in a shallow case and opened at will, like the pages of a book.
The organization of an exhibit of such importance, at a distance of 3,000 miles from home, required, it is hardly necessary to say, the expenditure of a large sum of money; but the United States do not mind expenditure, and have good reasons for their liberality in that respect. The total outlay was not less than $\$ 80,000$, and what is interesting to note is that this considerable amount came from different sources. The State of New York gave $\$ 10,000$, the city of New York as much more; the cities of Boston and Chicago $\$ 5,000$ each; while other cities, Denver, Albany, St. Louis, etc., also contributed to the expenses of the undertaking.

A valuable exhibition, especially a foreign one, needs persons to explain it properly and present it to visitors in a suitable way by directing their investigations and making them at home in their new surroundings. In this respect, too, the Americans conducted matters on a liberal scale. There were attendants and obliging cicerones, both men and women, some of whom spoke French as well as English, who were ready to do the honors of the house for visitors. Their chief was an administrative officer of distinction, who holds a high position in education in the United States, Mr. Howard J. Rogers, [deputy] superintendent of public instruction of New York, upon whom devolved the double direction of the American sections of education and social economy. Mr. Rogers, who remained in Paris during the entire period of the Exposition, was not satisfied with organizing and superintending the American exhibit and welcoming to it French and other European pedagogues, but, with char-

[^87]acteristic American initiative, with the assistance of his countryman, Mr. Alfred T. Schauffler, "associate superintendent" of the city of New York, he inaugurated addresses in the palace of the congress upon school life in the United States. The originality of these talks consisted in using the cinematograph and even the phonograph as aids to the lecturer. In fact, an Edison cinematograph brought before the audience scenes from school life, such as children of a kindergarten at their games, and older pupils saluting the American flag while singing the national hymn, while a phonograph placed upon the lecturer's table accompanied the views by rendering the songs, which seemed to proceed from the lips of the youthful patriots seen in the pictures.

But pictures and voices are not the only things which Mr. Rogers brought us from New York. However spirited may be the effort to render an exhibition of school matters complete and attractive, objects presented to the eye are always insufficient to represent faithfully the actual work of the schools. We can not, therefore, sufficiently thank the representatives of American education for having been at the pains to prepare for the Paris Exposition a detailed study or set of monographs, full of information, upon each branch of their system of instruction or "education," as they call it, which leave nothing relating to their admirable institutions of public or private instruction unexplained. The State of New York took the initiative in this important work, the whole of which forms two volumes of 500 pages each. It is an imitation of the pedagogical monographs prepared under the direction of M. Ferdinand Buisson for the French Exposition of 1889, but with the essential difference that the American monographs are not confined to primary instruction, but include institutions of all grades. They are the work of competent writers and distinguished specialists, among whom are some of the greatest authorities in American pedagogy-Drs. Harris and Draper, for example. Prof. Nicholas Murray Butler, of Columbia University, New York, editor of the Educational Review, is the author of the introduction, which is full of substance, and sketches in bold lines the condition of education in the United States. These monographs are nineteen in number.

It would be very desirable to have this valuable collection translated into Freuch. Who could tell us about American schools better than the Americans themselves? Would it not also be a timely act of politeness and one worthy of French hospitality to render into French, and place within the reach of all friends of instruction, original documents which are a mine of information, and have been prepared for us with such care and at such a disregard of expense that 5,000 copies were intended for gratuitous distribution in France?
The first place in the American exhibit is naturally reserved for the maternal schools, or kindergartens (children's gardens), as they are called in the cormtry where Froebel's influence preponderates. Attractive photographs show us spacious schoolrooms, cheerful and agreeably decorated, in which children ought to be happy and comfortable. Good spirits ought to abound in such rooms, adorned as they are with flags, statuettes, and flowers. Froebel's gifts are displayed upon tables. Groups of children are shown in which the countenance of a little negro boy appears in the midst of the faces of white girls. Again, there are little school family groups, dominated by the attentive and amiable-looking teacher, who is superintending the exercises and manual work of half a dozen of her children. Still other pictures show large assemblies of little boys and girls. This is often the case in American kindergartens, which are sometimes so largely attended that it is said there are as many as nineteen teachers in one school.

Dr. Compayré proceeds with copious extracts from American writers relative to the kindergarten, more particularly from the monographs on the subject, prepared for the Paris Exposition. He passes then to the discussion of other grades in the United States, chiefly as set forth in the monographs, but with occasional comments of his own. Thus after presenting the plan of studies for the elementary schools approved by the National Educational Association, Dr. Compayré says:

This plan of studies includes two characteristic innovations which show very clearly the importance of elementary education in the United States, the tendency there to extend the field of studies-the long period of eight years of school life allowing of a leisurely movement-and the intention to facilitate the passage from the primary to the secondary grade of instruction by introducing into the elementary schoolsstudies which are reserved in France exclusively for colleges and lycées. These two innovations consist in the introduction of a foreign language, living or dead, Latin, French, or German, at the option of the pupil, into the studies of the eighth year, to the extent of five lessons a week of thirty minutes each; and in the introduction of algebra into the studies of the seventh and eighth years, five lessons a week. These
are good plans, but it must be admitted that they exist for the most part only on paper, and that, as a matter of fact, the American school is far from having realized all that the members of the National Association designed for it in their somewhat ambitious programmes. As far as instruction in French in particular is concerned, we have vainly sought for a specimen of this study among the exercises on exhibition. Only in the exercise books sent from the Boston high schools do we find any attempts in French composition. German is taught at Chicago, beginning with the fifth year; but the situation there is peculiar, the composite population of Chicago comprising hundreds of thousauds of citizens of German origin. As to Latin it seems, too, that the recommendations of the National Association have remained a dead letter. On the other hand, we find in the Chicago schools, again, if not real exercises in algebra, at least problems in geometry solved by algebra. ${ }^{1}$
The exercises sent from New York indicate a more complete instruction, and show that there is a regular course in algebra in the eighth year. ${ }^{2}$
These, however, are exceptions-ventures which only the schools of cities advanced in intellectual culture permitted themselves to make-the adrance guards of schools, so to speak. It would be more important to examine how the essential portions of the programmes are applied. What first strikes us in looking over the work of the pupils, as in reading the programmes, is the predominance of concrete over abstract subjects. There is not much orthography; it is only studied during three years, while penmanship is studied for six years. There is very little history, the Americans caring little for the past; but, on the other hand, there is much geography. It is the present world which it is desired to show to the young American. Doubtless he will be well drilled in arithmetic, which he will need in his practical life as a business man or in some industry. No nation, says Dr. Harris, pays so much attention to arithmetic. But a large place is also allotted to the study of nature, much larger than with us, because the future workman must know the natural forces which he must master and subdue.

If one were to ask me what strikes me as particularly excellent in elementary instruction in the United States, I should reply at once that it is manual dexterity as shown in pemmanship and drawing. The fine exercise books, neat and well kept, were worthy of all praise. In them were displayed, in perfect clearness, the large letters of the new penmanship which has come into vogue within three or four yearsa kind of penmanship which is without elegance, to be sure, and which strives to resemble printing as closely as possible with its straight and stiff letters, vaguely suggestive of cuneiform hieroglyphics; but how clear and easy to read! But what is of greater importance is the incontestable superiority of the American school children in drawing. Look over the drawing books of the primary schools and the work of the kindergarten and you will find drawings in all of them; drawings from objects, sketches in pencil or ink, and sometimes in colors. Drawing is king in American schools. It is so not only because it is taught regularly as a separatestudy during the eight years of school, but also because it is mixed with all the other subjects of study. All exercises in composition, style, or history are illustrated with drawings, more or less well done, made by the pupils. Just as we require that morals should be introduced into all our school exercises, the Americans seem to demand that drawing should receive the same attention in their schools. * * *

With respect to school architecture in the United States, Dr. Compayre says:
But we can not leave the exhibition without mentioning the splendid palaces devoted to education, whose elegance and size we are able to appreciate, even at a distance, as shown in the photographs, of which there are a great number. As far as architecture and school hygiene are concerned, the Americans are incontestably the masters of all of us, and no people have been at such pains to install the pupils of primary instruction in comfortable surroundings.

[^88]First example: Given $\frac{1}{6}+\frac{1}{12}=\frac{1}{x}$. Solution: $2 x+\frac{1}{3} x=12$
$3 x=12$
$x=4$
Second example: Given $\frac{1}{18}-\frac{1}{x}=\frac{1}{45}$. Solution: $\begin{aligned} & 5 x-90=2 x \\ & 5 x-2 x=90\end{aligned}$
$5 x-2 x=90$
$3 x=90$
$3 x=90$
$x=30$

Americans do not disdain external ornamentation and handsome facades for their schoolhouses-things which give an agreeable aspect to their exteriors. But what they give particular attention to is the internal installation, the arrangement of the rooms, sound hygienic conditions, heating, lighting, and ventilation. It would be worth while for our architects to make a detailed study of the heating apparatus, the air supply, and ventilation, described by Mr. Morrison, who is an expert on these subjects, as shoryn in his work, The Warming and Ventilation of School Buildings. Many ingenious processes have been invented by the builders of the schoolhouses, who, while making it their principal olject to provide for the health of the scholars, neglect nothing which can be sugerested by the law of hygiene or can contribute to comfort. It is not regarded as sufficient to keep the scholars warm when the weather is cold, but they must be kept supplied with fresh air at the same time, so that they may be able to fill their lungs with it constantly. And as in some of the cities theaters and concert halls are placed on the roofs of buildings, sometimes seven and eight stories high, so, when space is limited, the halls of recreation are sometimes placed on the roois of the schoolhouses. But there is rarely any want of space, the Americans being determined that the schoolhouse should be spacious enough to allow each pupil to have plenty of room. This is one reason why they have discarded the system of school benches, upon which the children are squeezed together, elbow to elbow. The single desk, a separate chair for each pupil, is the universal rule and is a characteristic of the American schoolroom, and is appreciated not only as a means of facilitating discipline, but the Americans also see in it an image of the indi- . vidual independence which the Constitution of their free country reserves for the future citizen.

We pause here, but not without felicitating again the organizers of the American exhibit upon the efforts they have made and the ingenuity they have displayed to make clear to their visitors in Paris the whole and the different parts of their institutions of education. The result will be to increase and extend the knowledge, and with it the admiration of a pedagogical régime, which places the United States in the first rank among those nations which desire and know how to instruet and bring up their children properly. The result will also be that the French, having become better informed in certain respects of what is being done on the other side of the Atlantic, will perhaps endeavor to imitate some of the American practices in education. We are certainly struck with some hiatuses, or at least differences from our own practice. How is it, for instance, that moral instruction, properly so called, does not appear in the American programmes, and that Dr. Harris points out as an exceptional fact that in 27 cities one hundred and sixty-seven hours in a year were devoted to lessons in morals and good manners? The answer is that religious activity is stronger in the United States than in France, and that the instruction given in the churches of the various denominations, which are zealous in proportion to their number, makes a general lay instruction in morals less necessary. And, after all, the Americans can say, "We do very well as to morality without having special teachers of morals." Another point in which the Americans differ from us is that they have hardly any supplementary instruction for graduates of the elementary schools. To be sure, we roust consider that the question of instruction after leaving school is naturally less acute in the United States than in France, the school conditions in the two countries being so different. The American pupil remains in the elementary school until he is 14 years old, while the little French boy escapes from school and flits out into life generally in his eleventh year, or three years earlier than the American. After eight years of continuous attendance the youthful American naturally carries away from his school a larger quantity of knowledge, and consequentiy has less need of the supplementary instruction which we are compelled to seek in a postgraduate course on account of our too short school attendance. Perhaps, too, a larger number of American pupils continue their studies in the high schools, our superior primary schools not having yet succeeded in attracting the clientèle which they ought to have. Still another difference, entirely in favor of the United States, is that nowhere in the world is education so mueh the business of everybody. Not only do the 45 States organize, each in its own way, and with a spirit of local enthusiasm, its various institutions of education, but private citizens also, united by thousands in private associations, work together for a common purpose. Thence has arisen an admirable system of education, free and flexible, adapted to the needs of each city and region, a system in which the general popular will is expressed better than in any other American institution, and of which President McKinley was justified in saying that the American public school, with its 400,000 teachers and $15,000,000$ pupils, is a pillar of strength for the Republic.

## CITATIONS FROM AN ARTICLE BY M. GUSTAVE LANSON (REVUE BLEUE, DECEMBER $29,1900) .{ }^{1}$

Under the caption "The problems of national education" M. Lanson has considered the spirit and significance of education in the United States as indicated by the exhibit at Paris, and especially by the series of monographs prepared for the Exposition, from which he quotes in extenso. The introduction to his article, his reflections upon our scholastic institutions above the elementary grade, and his conclusion, in which he contrasts our own education with the French system, are here reproduced.

At present, when French democracy is seeking to free itself from the social, religious, and political forms of the past, no problems present themselves which are more urgent than those of national education. Upon the solutions which will be reached will depend the being of the coming generations; that is to say, the life or the death of democratic institutions. There is no one now who does not recognize this, even, or especially, among the adversaries of democracy.

But before undertaking to discuss these vital questions here, bringing them up as occasion arises, it is well to have made an excursion abroad and observed how others conduct their affairs-not, indeed, in order to preach a servile imitation of the edu-- cational. institutions of other nations, from which we have more than once suffered, but in order to understand ourselves better, to distinguish more clearly the special conditions which in our country, by reason of our past and our national genius, enter into the general problems of pedagogy.

The Exposition just closed invited us to that journey, and provided us with means of making it without leaving home. There is hardly any country which did not offer us useful lessons. But in the absence-unexplained-of Germany, whose pedagogy was represented by optical and surgical instruments; in view of the obstinate empiricism and traditionalism of England, which, for the rest, presented a rather confused and, in some instances, puerile exhibit, two countries preeminently merited attention-Russia and the United States. Russia, especially because of the obstacles interposed by political policy, has launched, with as much energy as intelligence, into the difficult undertaking of the education of women and the masses. But it is at the United States particularly that we must pause. Their exhibit, marvelously presented, was completed by nineteen "Monographs on education in the United States," published under the direction of Mr. Nicholas Murray Butler, professor of philosophy and education at Columbia University. * * *

These reports exhibit every part of the system of American education, expound for us all its mechanism and all its institutions, furnish us with the principal statistics, and, beyond that, explain the spirit, the tendencies, the needs, and the ideals of their country. I shall, therefore, avail myself of these remarkable productions, which recall the reports, so luminous and so lofty, of Mr. Gréard, in order to indicate those characteristics of education in the United States which appear to me the most curious as well as the most useful to be noted. * * *

In secondary education we find the same development as with us of the three courses of instruction-the classical with Latin, the modern with English, and the scientific. Latin is in vogue, and it is beginning to be felt that Greek does not occupy the place which is its right. The effort not to encumber the programme is rendered successful by a very flexible system of equivalents; it is so arranged that all branches are taught, but not everybody is taught them, and that the student is allowed to select, in a measure which varies with the different schools, his subjects of study. To learn a few things thoroughly is considered preferable to a course which skims all the sciences without penetrating into any. But, above all, the end aimed at is not so much the furnishing of practical knowledge as intellectual discipline, the formation of good habits of thought. Nowhere, not in mathematics, nor in classical studies, nor in the study of living languages, is the end lost sight of-the development of the scientific spirit. Sacrifices are not made to practical knowledge any more than to formal culture. It is desired that everything be taught in such a manner that the child may be trained in the use of methods, that he may see by what means truth is worked out in every field, by what signs it may be recognized.

The universities, those which are worthy of that name, are laboratories of research; the individual does not work for himself, but for science. He does not go there principally to seek benefits for a career, technical acquirement, or diplomas which have a money value. To speak truly, the conflict here is acute. Already in the
high schools the positive spixit had to be fought against; here the evil is worse. There is hardly a university whose philosophical faculty (in the German sense, comprising letters and science) is not flanked by a school of law, or medicine, or engineering, frequently by a reterinary or dental school. Those in a hurry abridge even their college course or skip it altogether, passing from the high school into the professional school. Everywhere in the universities influence must be brought to bear against the students rushing into bread-and-butter courses. But public sentiment reacts. University boards, State superintendents, the central bureau at Washington, are making vigorous efforts to stem the utilitarian tendency. And on the whole the disinterested taste for science is gaining ground. Twenty-nine State universities, the millions bestowed by Johns Hopkins in Baltimore, by Ezra Cornell in Ithaca, by Rockefeller in Chicago, bear witness that science has won its case with a people who, Taine believed, were destined to devote themselves eternally to sell salt beef and to worship the alnighty dollar. * * *

I have not yet spoken of the education of women, and it is not the least of the things to give us cause for astonishment and reflection. In the middle of the eighteenth century less than 40 per cent of the women of New England were able to sign their names. To-day there are in colleges and universities-that is to say, in the higher institutions alone-22,297 women, or more than a quarter of the total number of students. The distinctive trait of the American system is the coeducation of the sexes. Coeducation is almost the rule in the South and West; old religious traditions still act as a check in the East. But sentiment in favor of coeducation is becoming more and more general. From the school to the university woman studies by the side of man, subjected to the same discipline, following the same programme. She gives evidence of at least equal powers of attention, intelligence, an equal degree of physical and intellectual capacity. They are neither rebuffed nor overworked, we aretold. They do not want a system of instruction organized for women, emasculated and agreeable, a culture suited for ornamental plants, nor, lower and utilitarian, a culture suited for plants of the kitchen garden. They want the virile discipline which develops the human being in the plenitude of his consciousness and his will power. Nevertheless, in the higher stages, they like to have homes of their own. Colleges and universities are founded open exclusively to women, while colleges or universities open exclusively to men are becoming rare. But it is only in order to enjoy all the advantages of a college life; for self-government, individual expansion, and the activity of association can only be unrestrictedly realized by residence on the spot, a thing not possible except in their own special colleges. It is for this life in common, not for particular courses of instruction, that these female institutions are established; and Bryn Mawr in Pennsylvania is one of the model universities of the United States, equal to any other as to the plane of its studies and the value of its diplomas.

Nor have I said anything about professional instruction, commercial, agricultural, artistic, or of the education of abnormal children, or negroes, or Indians; in these fields, too, wonders in the way of initiation and adaptation have been accomplishedbut I must limit myself. I note with interest that the Yankee is beginning to respect human dignity in the Indian; the unfortunate part of it is that when this respect will be universally felt the last of the Indians will have ceased to be.

I have said nothing about normal schools or normal courses, or the fact that boys are largely taught by women, which seems to be one of the excellent fruits of the civil war.

I have said nothing, finally, about university extension, or about that strange phenomenon, the Chautauqua-a summer encampment on the borders of a lake upon high terraces 450 miles from New York, and there, by the side of hotels and cottages, a philosophical lecture hall capable of containing an audience of three or four hundred; an amphitheater with a seating capacity of six or seven thousand. There a supplement of culture is given thousands of persons-everything is to le found: séances which afford diversion and serious instruction; those who attend only a day or a week, and stuatents who attend for years. Everything is taught, but the most original feature is that people are taught to read-not to spell, but to comprehend, to study a book. A course for home reading is arranged; the course occupies four years. People having returned to their homes, the Chautauqua instruction continues. The authors to be read each year, historians, moralists, economists, are pointed out, the books lent; a magazine, local circles, direct the individual, criticise what is being read, arouse discussion. The total enrollment of readers has been 250,000 , of whom 40,000 have persevered to the end of the four years. It is the university at home-methodical culture pursued in the shop or on the farm, along with the ordinary, everyday duties of life.

I pass by all this and return to the general features of the system. The two that
stand out most clearly are the constant adaptation to life, and in spite of this constant care for principles and ideals.

Nearly all the schools began by being English schools; the emigrants brought the customs of the mother country with them. We still see the English college in the American college. But before long the republican and democratic spirit made themselves felt in the system and removed it from the English type; now the German scheme of education, now French philosophy, more often local experience, altered and improver the original plan.

Absolute freedom has been the rule; noninterference of the Federal Government; limited intervention of the state, to secure free education, compulsory education, and inspection. Every city, every institution, has done about as it wished. The same causes acting, however, nearly everywhere, from out the diversity of names and methods a general system has gradually outlined itself. And it is to evolve it completely that the efforts of the most eminent educators are more and more directed. They study to reduce to a harmonious symmetry, to a rational order, this confusion of incoherent units. This desire is manifested by two tendencies already partially realized, or at least declared, to discriminate the various organs and subordinate them properly one to another. The complaint is made that the college partakes equally of the character of secondary and of higher education; that the university is not detached from the college; that the technical schools are not detached from the universities; to each organ its one appropriate function. On the other hand, it is desired to bind together these organs, to coordinate those that are on the same level, to hierarchize those that are different. Municipal, county, or State superintendencies tend to level all the schools of the same order in their jurisdiction, to establish a unity of method and of spirit.

The colleges, by their conditions for entrance, control the high schools and regulate their programmes; the universities exercise a like sway over the colleges. Associations of colleges and universities-a national educational association-tend to establish equal levels of culture in the various grades throughout the country. The reports of the Federal Burean, by bringing all that is being done in each place to the knowledge of all, contribute effectively to this leveling, accelerate the advance toward symmetry and unity.

Last trait to be noted: The authority conceded to inspectors, administrators, directors. A single man with extensive powers and a high degree of responsibility-that is the American idea of the real way to assure the work being done and done well.
"Each of the two great departments, administration and instruction," says the committee of fifteen of the National Educational Association in a recent report, "should be wholly directed by a single official who is invested with ample authority and charged with full responsibility. * * * If anything goes wrong, he should answer for it. * * * He must periect the organization of his department and make and carry out plans to accomplish this. If he can not do this in a reasonable time, he should be superseded by one who can." Here is the secret of the progress in American education. Everybody is consulted. A single person acts, and must act, or leave.

The more we should study the organization whose large outlines I have summarily indicated, the more matter should we find for reflection. Does that mean that we should imitate the United States? Far from it. For in many points their needs are the reverse of ours. History has made the American and the French systems complementary to each other. They aim at symmetry, we suffer from it; at centralization, we are stifing under it. They wish to correct incoherence, we should like to diversify unity; they extend the power of the state, we should be tempted to restrict it. They strengthen the professional preparation of teachers. They no longer want the old type of American-good for everything, expounding anything. In teaching, as every where, they want specialists. With us, we have too many speciaiists and not enough men. In teaching, particularly, it is not professional ability that is lacking; it is soul. We are perishing from professional regularity and mechanical administration. They want Latin and dream of Greek in secondary education. We are tyrannized by Latin and Greek, and have as yet no modern or scientific courses of instruction worthy the name. In the universities they are beginning to feel the insufficiency of German erudition, of special research, of monographs and statistics; to learn of us the art of general ideas and large syntheses. We are only commencing to leave off oratorical generalities, and German discipline will for a long time to come be beneficial to us in many things.

But amid this opposition analogies are, nevertheless, noticeable. We are a democracy, and the spirit of instruction in the United States-the rousing of free inquiry, apprenticeship in self-government-is or should be the basis of our institutions and of our scholastic discipline, from the lower schools to the university. We, like the

United States, live in an industrial, practical age. We must satisfy utilitarian inclinations, economic needs, and yet save the culture of the man and the citizen. They, like us, have a mania for diplomas and a multiplicity of them, and we as well as they ought to see to it that the diploma should be the exact symbol of a real fund of knowledge and culture. More religious than we, in virtue of the protestant spirit of free inquiry, they have, nevertheless, freed the greater part of their schools of their sectarian character, and, like us, they make secular education, the formation of the critical faculty and of conscience, the basis of national morality. Their faith in the moralizing value of serious studies is more complete and more enthusiastic than ours, for no sect with them is interested in drawing up discouraging statistics.

In a word, I do not believe that there is anywhere on earth a system of instruction more unlike ours; more impossible to be transplanted on our soil. And there is none that is more instructive for us or which could serve us better as an inspirătion. The same spirit, the same ideal, animates both, under contrasting systems. But it is manifest that to reach the same goal they and we must often travel in opposite directiōns.

Removal of american exhibit to manchester, england-opinions of english CRITICS.

The technical instruction committee of the corporation of Manchester, at the instigation of Mr. J. H. Reynolds, director of the Manchester Technical School, secured the loan of the educational exhibit of the United States and had it transferred at their expense to Manchester, where it was placed on exhibition. It was visited by about 30,000 people, many cities and towns sending large delegations of teachers to examine it. The following extracts are selected from the vast number of notices which appeared in English papers relative to the material. A special catalogue of the exhibit, prepared by Mr. Reynolds, is also appended.

THE AMERICAN EDUCATIONAL EXHIBIT AT MANCTESTER. ${ }^{1}$
By Fabian Ware, Representative at the Paris Exhibition of the Education Committee of the British Royal Commission.
Manchester is to be congratulated on its educational zeal, or, at any rate, on its educational zealots. While the majority of English teachers were basking on the sands of their native shores during the summer holidays of last year, or hurrying through Paris on their way to Switzerland, more than one Manchester educationist was busily engaged in studying the pedagogical section of the International Exhibition. Among these sections the French was naturally by far the largest; the American was, with the possible exception of that of the Ville de Paris, the best organized and the most attractive. It must not be imagined, however, that it was for the keen educationalist a case of seeing America and dying; several other countries were undoubtedly superior in special departments to the United States. The magnificent dining room, for instance, designed, constructed, and furnished in every detail by the Ecole des Arts Industriels of Geneva, was a unique example of the art of exhibiting education; the large display of French technical education organized by the ministry of commerce has never been, and probably never will be, equaled; and even in our own section the old science and art department in an expiring effort brought together a collection of works from our schools of art which outrivaled anything of the sort in the American exhibit, both in organization and in individual merit. ${ }^{2}$

But the attraction of the American section for the observant student of education was not so much due to the surpassing excellence of any special departments as to the very remarkable evidence which it afforded of the compatibility of the highest educational ideals with the most vigorously democratic spirit. Though America possesses no central authority-in the European sense of the term-and although every State enjoys the most absolute freedon and independence in building up its own system of schools, we find a common purpose at work and certain fundamental

[^89]principles generally accepted, which we seek in vain-unless it be in Germany-in other countries. This exhibit was, in these respects, all the more interesting from the comparison which it challenged with its French surroundings. France and America are the two modern exponents of democracy based on the "rights of man." We would expect, therefore, that each would be true to the foundations of its polity in recognizing and fostering the rights of every individual to the fullest and highest education. While the French Government, however, is every year strengthening the regulations which direct the children of the poorer classes toward technical education of a specialized type within what may be termed the secondary sphere, America still considers free secondary education needful for the development and progress of its citizens. The general absence of any technical instruction of a lower grade than that which is the crown of a sound general secondary education is the first thing that will strike the people of Manchester who visit the exhibit, and may cause greater heed to be paid to the roices raised in their midst against the cardinal error in the present educational development of England.

Although it is true that there are nearly as many systems of educational organization as there are States, one finds yet other common features in the American schools. This is not surprising when one considers the influence of the National Bureau of Education.

The work of this bureau is theoretically the same as that of the special inquiries branch of our board of education; that its authority is greater and more readily recognized is to be traced to the fact that all American teachers turn to it as the only form of a national central authority which they possess. Thanks to its ceaseless activity, all successful educational practice and every interesting experiment is registered and made the common property of all teachers in the land. This bureau is, doubtless, both a cause and a result of the great interest which is shown by the teachers of the United States in educational theory. The English visitor to their exhibit may, perhaps, think that their zeal for theory is excessive. He will certainly be struck in some cases by their very literal interpretation of the principles of Froebel, and will consider that in some schools correlation is pushed to an extreme. And yet it is impossible to deny that there is a very great advantage in knowing why, from a psychological point of view, each subject is taught and what functions may or may not be assigned to it in the whole sphere of education. In this connection the exhibit can not have quite the same value at Manchester that it had in Paris; for there Mr. Howard J. Rogers, deputy superintendent of schools for the State of New York, was unsurpassed among my colleagues for his wide knowledge of everything associated with the exhibits under his direction and for his unfailing courtesy in placing that knowledge at the disposal of all visitors. But even without his interpretation the facts alluded to must be apparent to anyone who seriously studies the different phases of school life here presented.

Among other general features, the widespread system of coeducation should be noticed. It is to be found in about two-thirds of the total number of private schools and in 65 per cent of the colleges and universities; it is the general practice in the elementary schools; and, in response to Dr. Harris's inquiries, of the 50 principal cities enumerated by the census of 1890, 4 reported separation of the sexes in high schools only, 2 reported in 1892 separation in all grades above the primary, and 6 both separate and mixed classes in all grades. Of the smaller cities, only 24 reported separate classes for boys and girls in different grades. When these figures are taken into account the large proportion of women teachers in American schools is not surprising, though it should not be forgotten that the civil war gave women a unique opportunity of proving themselves to be capable substitutes for men.

Nothing attracted greater attention in Paris than the methods of teaching drawing adopted in some of the primary and secondary schools in the United States. Not even a Rousseau could imagine a course of instruction which allows greater freedom of development to a child, and it is difficult to conceive a method which takes greater advantage, for the training of observation, of a child's natural desire to draw everything he sees. The pleasure of sending on to the American section choleric Teutons who vehemently protested against the want of "discipline", in our English brushwork exhibited in Paris may be well imagined by those who have studied the exhibit in Manchester.

It is impossible within the limits of this article to deal with even a hundredth part of the exhibits which-thanks to a series of cupboards containing a succession of vertical leaves or flaps on hinges-are to be found in the small space occupied by the American section. About one-half of this space is devoted to primary and secondary and the other half to higher education. Every type of educational institution is shown in all details of its organization and activity by means of photographs, tables of statistics, specimens of the work done by pupils, and rows of educational literature.

Repetition is at the same time carefully avoided. Each university, for instance, exhibits its work in that branch of studies for which it is particularly renowned.

The cost of the whole exhibit must have been enormous-from a rough calculation five times as much as that of our-but then our trans-Atlantic cousins have never grudged money to education. It is with justifiable pride that Prof. N. M. Butler tells us, in his introduction to the admirable series of monographs published for free distribution in Paris, that the vast sum given in aid or endowment of education by individuals "recalls the best tradition_of the princes and churchmen of the Middle Ages, but is on a vastly larger scale." He says that "an unofficial estimate of the amount given by individuals during the year 1899 for universities, colleges, schools, and libraries is over $\$ 70,000,000$. ." Evidently some good follows in the "trail of the trust." It is to be hoped that this beautiful exhibit will encourage English teachers to take a greater interest in the educational achievements of all Anglo-Saxons across the seas. Manchester, in bringing the mountain to Mahomet, has shown commendable tact and energy.

NOTIONS OF TEACHING FROM AMERICA-AN INTERESTING EXHIBITION. 1

## From a correspondent.

In securing a loan of the exhibits sent by the American Government to the Paris exhibition the corporation of Manchester has done a distinct service to the cause of education, and the opportunity thus provided of seeing these exhibits is one which should not be neglected. They are on view in the new Central School, Whitworth street (close to London road station), and there is no charge for admission. Here we have a large number of specimens of the best work done under the best teachers in a go-ahead country, which has about half a million teachers at work. And the first impression forced on one is that the nation that produced these exhibits is a nation that values education for its own sake. Buildings, apparatus, results, all are alike worthy of a nation that spends more on education than on munitions of war.
The exhibits are at once manifold and varied. They represent all grades and all sides of education. One can begin with kindergarten and end with the university, for the course ranges from the making of mud pies (clay modeling) to the resolution of nebule. Educational ideals, educational methods, educational development, school government, and school architecture all are dealt with.

The exhibits are of many kinds and are arranged in different ways. Some of the children's written work is bound in stout volumes, some is in large portfolios; a great deal of it is mounted on cardboard panels, set in a hinged framework, which fits in a kind of cupboard. On the outer panel, which when shut is fastened with a spring latch, is the name of the school and other particulars. On the inner ones are the exhibits sent by the school. The arrangement is an admirable one, both for purposes of exhibition and also for keeping the exhibits clean, especially for the latter, as the cupboards when closed are practically dust proof, and it is never necessary to touch the exhibits when examining them.
There is a variety and freshness about the work which shows that American teachers work in an atmosphere of freedom which has hitherto been unknown in English schools. And looking to the higher grades and the rapidity with which America has advanced as an industrial nation during recent years, there can be no doubt that she has been wise in encouraging initiative on the part of her teachers. Here in England our teachers have been code bound-swathed in red tape for over forty years. At last our education department has recognized the folly of this course and has appealed to its teachers to strike out on fresh lines. But the liabits and customs of forty years can not be shaken off in a day, and unless school boards and other managers encourage their teachers to get back to first principles the fullest possible benefit will not be got from the departure. In view of this change the American exhibits come most opportunely, for we can conceive of nothing which would better aid a teacher or a manager than a visit to this exhibition at this juncture.
By this we do not mean to say that the American work is in all respects superior to what is done in England; but if we are to profit from it our object should be to find the points in which it is superior and endeavor to assimilate these.

Confining ourselves to the primary work, for it is impossible to deal with all even in a general way, we would say that the American methods are more natural. American teachers do not endeavor to get little children to produce carefully finished work in the early stages.

They are content with promise, and in this they are wise. A comparison, as regards style, between the writing done by an English child in Standard I, and an American child at the same stage would be all in favor of the English child. But the results at subsequent stages do not prove the superiority of our English method. In fact, our method is wrong, for it is unnatural to expect such accuracy from children at so early an age. In drawing this difference in the two systems is most marked. Indeed, a great deal of what is taught as drawing in our schools is conspicuous by its absence. From the beginning children are allowed to draw "things." Sheet after sheet in the folios and panels are covered with crude drawings of cats, dogs, etc., just the sort of thing that we have been in the habit of thrashing our lads for doing on the sly. It is possible that this has been carried to excess, but subsequent results show that here again the Americans are on the right track, for, as Ruskin lias recommended, they have endeavored to make drawing a means of obtaining and communicating knowledge. Ruskin says "he who can accurately represent the form of an object and match its color has unquestionably a power of notation and description greater in most instances than that of words; and this science of notation ought to be simply regarded as that which is concerned with the record of form, just as arithmetic is concerned with the record of number."
This is the principle the Americans have endeavored to carry out. In all descriptive essays sketches are introduced wherever possible, as a means of communicating knowledge. This admirable feature is, we believe, almost unknown in English schools. In fact one great difference between the two systems is that the American system is more graphic throughout.

In arithmetic this method is largely employed. But before dealing with that we should like to say that we believe that this subject is about the worst taught of any in our schools; although "a nation of shopkeepers," we have a clumsy antiquated system of weights and measures, which severely handicaps us in foreign trade and throws burdens on our school lads that are "grievous to be borne." Again, the exercises worked in our schools are in the main of an impracticable nature. And, last of all, the arrangement of the work for teaching purposes is educationally unsound. The work has been divided into a number of "water-tight compartments," in the most mechanical manner. The work of later years is not based on that which has gone before, and there is no provision for proper revision of work. To a considerable extent the Americans share these disadvantages with us, but in some directions they have made distinct progress.

And the chief advance is in the graphic methods of working they employ, especially in the early stages. For example, the following problem was given: How many square feet are there in a board 8 feet long by 2 feet broad?

In each case this was solved by drawing a rectangle (to scale) 8 by 2 feet, dividing it off into spaces each representing 1 square foot, and reasoning from the diagram. There are 2 rows, each containing 8 square feet; therefore the number of square feet in the rectangle is 16 square feet. This method of explanation is, we know, common in English schools, but we do not believe it is the custom to make lads employ it in the solution of problems.

Another characteristic feature of the American system is the general adoption of Herbart's system of correlating subjects. The object of this is to give the pupils a good, serviceable grip of facts without wearisome repetition, and it is worked somewhat as follows: Suppose the object is to give the children a general idea of the parts of a plant and their various functions. First of all an object lesson on the plant would be given. Next, the children would make a colored drawing of it. And, last of all, they would be asked to write a description of it in simple language. It vill be evident to all that this is an exceedingly interesting and educative way of treating the subject. Each step calls different faculties into play. The subject never loses its freshness, and the interest never flags. Some of our best English schools have employed this method for a good many years with great success, but the system is far from being as general as it is in America.

Space forbids us to go into further details, but we trust we have said enough to induce a large number of local educationists to visit the exhibition.

It will be open till the 9th of March, but we would advise visitors to keep off Saturday, if possible, as the rooms on that day are crowded with teachers and others who are unable to go during the week.

THE AMERICAN EDUCATIONAL EXHIBIT-THE PRIMARY GRADES. ${ }^{1}$
By H. T. Mark.
There is so much to see in the vivid presentation of life in the American school which is now open to the public in Whitworth street that intending visitors will probably be glad of a further word by way of brie? general introduction to the contents of the spacious room devoted to the exhibit in the new central board schools. Probably, as the American schools differ so widely in many ways, both in teaching method and in what in England is called "discipline," from our own, a few general characteristics may be indicated at the outset. Individuality is the aim of the whole of the school life and work. Coercion of unwilling learners is almost unknown. The school work is the child's willing expression of himself; the school life is part and parcel of his own natural life, which it supplements, enlarges, and interprets. Two factors concur to this end-the educator's interest in the child and the child's interest in what he is set to do. These two forces naturally merge into each other, and are part of what is spoken of further on as the American spirit in education. Out of the educator's interest in and study of the child springs a course of study which, at any rate in the earliest years of school experience, meets the child half way and ministers to the forms of intellectual hunger which manifest themselves between the ages of 5 and 10. It is here that the educational revival of the last twenty-five years, which is commonly spoken of in America, has its completest expression. In the kindergarten between the ages of 4 and 6 and in the primary grades of the next four years (neglecting local variations) the aptitudes and ability of the child, intellectual, moral, and social, are the prime consideration. As a result we find love of color, love of story and of picture, frank self-expression (which the schools especially encourage), interest in nature, and concrete ways of approaching abstract and formal subjects marking the entire work of the primary-grade pupils. The great moral features are the beauty-loving and the free. One is tempted to illustrate these points from actual observation, but in this place one must refer rather to the exhibit, which, indeed, in spite of the fact that one ship containing valuable sections was lost on the way from New York to Europe, is more than ample for the purpose. Liberty is to be looked for everywhere as the dominant feature of the children's work; color and illustration of various kinds are the second striking feature of the work in these departments of the school. The very practical question will be asked, Does not the elaborate brush and pencil work adorning compositions, and even examples in arithmetic-an instance of the excessive use of a good thing-take up a large amount of raluable school time? It would if it took up the teacher's time or left it unoccupied with more valuable forms of energy, but this is not the case. Each grade under its single teacher is, practically everywhere throughout the primary departments, divided into two sections, taking desk work and oral work alternately. Roughly speaking, therefore, half of the school time of the scholar is taken up at the desk in work relating to his oral or class work, and of the nature of practical exercises upon it. This "seat work" or "desk work" or "busy work," as it is variously called, is what is shown in the cases. The exhibit might in this sense be said to show what the children can do for themselves without the teacher's guidance, as a result of the work done during alternate intervals with the teacher, and also, in part, as a result of the child's own intent pursuit of his task. The businesslike bearing of the children in the average American schoolroom, quite as much in the primary grades as in the high school itself, is one of the most noticeable characteristics. At once one feels that the school life is not primarily the teacher's business, but the child's. Making the necessary allowance for inevitable exceptions the American child does not go to school to be "disciplined" but to learn; the home is behind the school in this respect, but most potent of all is the course of study and its fitness for the child. Formal, exact, "finnicking" work, abstract process, and mass of detail are withheld. Child study has at least done this for the American boy and girl in the first ten years of their school life. Whether it has done too much for the child from ten or twelve or fourteen is another question not needing to be discussed here. The influence of the kindergarten, with its rapidly increasing army of over 200,000 pupils (it was estimated upon reliable evidence to stand above that figure in 1898), accounts for much of the improvement in primarygrade work, following as it did upon Horace Mann's propaganda of Pestalozzianism. But there is something deeper than that-more vital, more national. The American spirit began to declare itself in educational matters, and its first spokesman was Francis W. Parker, a combination of American shrewdness and Pestalozzian enthusiasm. Mr. Parker had been a colonel in the army of the North, and having directed
his energies to education, became superintendent of schools in the town of Quincy, Mass., near Boston. The American feeling is intensely democratic and liberty-loving. Hence the sytem of student government which is described in the Bryn Mawr exhibit, and which is one of the best elements, from an American point of view, in American education.
The samples presented in the various cases and bound volumes and portfolios are no exaggeration of American school work. More striking pieces of work are to be seen exhibited on the stairs and along the corridors as well as in the interior of the classrooms of American schools even than those here shown. By way of actual guide to the contents of the cases perhaps one might suggest a first visit to cases 49 , 50 , and 51 , which represent the work done in the Washington schools. The exhibit consists of a large number of photographs of schoo! interiors with the classes represented at their work. The pictures are in themselves works of art, and were prepared without consideration of expense-as the writer knows, having purchased duplicates of some of them when in Washington. Nature-study is the center of correlation round which all the work circles more or less in the Washington schools. This should be noted, as in most cities literature is the center. To one point in the Washington exhibit special attention should be given. Manual training is carried right through the school system, from the kindergarten to the high schools. One by no means trivial testimony to the value of this plan arose out of the pressure put upon certain workshops at the time of the Spanish war. Youths from the Washington high schools were drafted off into the workshops, and not only proved their efficiency but soon equaled the workshop mechanics in their earnings.

With reference to the kindergarten exhibits, readers should be reminded that there is no formal work in the "three R's" in the American kindergarten or infant school. The whole programme consists of the opening exercises, gifts, occupations, games, (with and without music), and nature-work. Actual gardens are cultivated by the children under the school walls, not only in such favored and open cities as Washington but in Chicago, if only the school is far enough from the actual center of population for this to be possible. The large gifts, wool work on simple wooden frames rather than the fine paper weaving, exercises in threading stout colored cords, as preparatory to the kindergarten sewing, will be observed as exemplifying the tendency to begin with the large and relatively easy. In the primary grades pictures of Washington and other school children at work show them standing at the wall slate in their first attempts at writing for a similar reason; the large muscles are first developed, and their use is easier and more natural to the child. Interest in the objects made or represented and in the topics written about is always kept as keen as possible by careful choice of objects and topics. The language work in the primary grade exhibits shows instances of first-grade children having brought to school a stem of real wild strawberry blossom or some other flower, which they mount upon the paper used for such compositions as "The wild strawberry blossom is. sweet." If the English visitor thinks that a child within his first year of formal work, whether reading or writing, should not attemptsuch words as "stra wberry" and " blossom," the answer of one of the mostsuccessful American teachers, whose school figures in the Chicago exhibit, would be, "Children learn the big words most easily." In this school children were seen in their first week at school "reading"-and is not visualizing symbols correctly reading?-"Hiawatha was the grandson of Nokomis," having pictures of the two as their chief guide. "Big-sea-water" was a word of delight to them, easy because so big. In arithmetic some equally original work is shown from Chicago and other places. Ratios and fractions, by the actual comparison of magnitude and the cutting and pasting of colored papers representing definite ratios are acquired almost from the first. The relation of magnitudes is held to be less abstract than the manipulation of symbols, the "sums" of ordinary arithmetic. This will explain some of the sheets being described as "Arithmetic, first grade," which look at first like exercises in free paper cutting.
"What are the vacation schools?" is one of the first questions to be asked. They arise out of local conditions and needs. The intense heat of summer makes a vacation of ten weeks a practical necessity; yet for the children of the slums this is a terrible opportunity of forgetting all they have learned at school and acquiring much that they will never unlearn. Hence "schools" are opened; but what are really opened are the "playgrounds," with indoor exercises and occupations, if the weather makes them necessary. The nature of the work done, which is really an extension of kindergarten life and principles for children of all ages, issufficiently shown in the exhibits. Newark, N. J. (cases 8 and 26), is especially typical of what American educators call the "new education," referring to the movements of the last twenty-five years. The farther one goes west, the more pronounced is the freedom in school work and the expression of individuality by its means. As illustrating this, the exhibit from

Denver, Colo., should not be missed. In general, it may be said that each city retains its own individuality, which the schools, in a measure, reflect; but at the same time this very freedom of initiative leads to a fairly identifiable uniformity. When one city has a reputation for the best, others are eager to study its methods, and, if approved, to follow them. On the one hand, therefore, there is every freedom to experiment; on the other hand, there is, what every visitor to American schools gratefully acknowledges, a perfect freemasonry among educators. The best is freely shown and frecly copied. In this spirit, as Alderman Hoy said at the opening of the exhibit, the loan was gladly made to Manchester. The exhibit was only got together with a view to making a matter of common knowledge any features of American education which may be worthy of imitation. As a last word, many visitors will be interested in the reports of the city boards of education, of which there is a collection on the left hand as one enters. Those of New York State (1898), of Cleveland, and of Sioux City are good examples.

THE AMERICAN EDUCATIONAL EXHIBIT-WOMEN'S EDUCATION IN AMERICA. ${ }^{1}$

## By Sara A. Burstall. ${ }^{2}$

Sir John Gorst in his recent speech reminded us that in the United States "every boy or girl had his or her natural gifts and qualifications developed, and developed in the same way and by the same general methods." In examining the exhibit shown at the Whitworth street central schools it is, therefore, not altogether easy to separate the parts bearing on girls' education from the whole mass-the complete representation of a system in which for many years women and girls have had equal opportunities with their brothers. According to the monograph on this subject, prepared for the Paris Exposition, these free opportunities have influenced the American people for nearly two-thirds of a century, and to the better education of the mothers of the poorer classes thus provided may be attributed much of the extraordinary industrial progress of the United States. The coeducation of boys and girls, all but universal in the primary schools and public secondary schools (except in a few Eastern cities), has made this equality absolute; the numerous photographs in the exhibition showing young people working together at all stages, from the kindergarten to the last years of the high-school course, bring home to the untraveled English people how natural, simple, and delightful this plan is under American social conditions. * * *

In secondary or high schools the preponderance of girls is marked. In 1898 they formed 55.5 per cent of all such pupils. In public secondary schools, according to the exhibit diagram, there are 260,000 girls as against 190,000 boys. Girls also stay later; 13 per cent finish the course-or graduate, as it is called-compared with 10 per cent of boys. It follows that in a high-school classroom for pupils of 17 or 18 years of age the girls considerably outnumber the boys. (See case 46.) The explanation is to be found in the fact that to women in America falls the responsibility of supporting the standard of culture, as indeed their natural position in the home might require; they are generally better educated than the men, whose horizon is too often bounded by the limits of the money market or the exchange. There are signs even in England that the stress of industrial competition may ere long bring about a state of affairs in this country also when a liberal education in the humanities will be the privilege of the noncombatant sex. That such is already the case with our cousins beyond the seas is shown in the diagrams above case 47 in C of statistics of studies in high schools. Many more girls than boys take Latin, history, and literature; the college statistics (case 72 and passim) tell the same story, as indeed do the records of our English university colleges. The colored diagram on the outside screen of case 41, showing in colors the relative numbers taking different studies, is misleading, for it makes no allowance for the fact that so small a percentage of the pupils finish the high-school course; the characteristic studies of the first-year programmes, Latin and algebra, necessarily predominate more than they should. We may remark that high-school work in America is arranged in courses corresponding to classical and modern sides. Girls as a rule choose the clessical or the English course, the latter generally when preparing for the normal school. Each includes a certain amount of modern languages, and of late years some physics; history, English, and mathe-

[^90]matics are compulsory in all courses, just as they are for the Victoria preliminary examination.

It is nearly true to say that American schools care little for results, in the sense of positive masses of accurate ordered information. What they seek is the development of individuality, faculty, power; and the final product as shown in their social, inctustrial, and intellectual life as a nation is the real test to them of the value of their educational system. Those who know, for example, the social charm of their cultivated women, the excellence of the post-graduate work in some of their universities, or the practical success of their methods of training engineers are well aware how much can be said for the American ideal as against that which has so long prevailed in England.

The higher education of women in colleges and universities is very fully treated in the exhibit now at Whitworth street. Not only are there pictures and records from separate colleges, coeducational and other, but there is also a valuable section (case 72) organized by a charactistic American society, the Association of Collegiate Alumne, which was founded in 1882 for practical educational work. The statistical tables, displayed for the most part by graphic methods, and therefore intelligible at a glance, show the extraordinary increase in the number of students during the last generation, and the greater proportional increase in coeducational colleges. To Manchester people, proud of their own coeducational university college, this fact has its own special interest. Endowments for women have also inereased enormously. There are in the United States four separate colleges for women which stand out above all the others-Vassar, Wellesley, Smith, and Bryn Mawr. All are well represented in the exhibit, and by some little study of the photographs in Section E it is easy to get a very fair idea of what life and work are in these colleges. All have been founded by private benevclence, and all possess land, buildings, and endowments on a scale resembling those of Trinity or Christ Church rather than of Girton or Newnham. Vassar is the oldest, founded in 1865 in a delightful country district in the Hudson Valley, an easy train journey from New York. Its splendor and stateliness, its wealth and beauty fitly correspond with its nearness to the greatest and richest city in the New World. The buildings, which accommodate 600 students, some in large residential halls, some in smaller cottages, are scattered over an extensive park like that of some old English estate; the students have exceptional opportunities for outdoor exercises and enjoyment, and the visitor thus carries away an impression of the freedom, health, and delight of social life at Vassar. Wellesley, in New England, not far from Boston, has an austere charm of its own, with its halls and buildings in the clearings of a virgin forest, near the shores of Lake Waban, where the girls boat regularly, as may be seen in the pictures of case 64 . It now has about 700 students, and resembles in style and numbers Smith, another New England college, in a lovely woodland region at Northampton, Mass. Case 78 is devoted to illustrations, etc., of Wellesley. The graduates of these two New England colleges supply a large proportion of the best secondary teachers in the Eastern States. Bryn Mawr, the youngest of the four, has its own character; advanced scholarship, a high standard both of entrance and degree work, and the special development of post-graduate work are its differentia. As regards the last point, it has been the pioneer of women's colleges, and has set an example which Newnham, Girton, and Somerville are endeavoring to follow, so far as their scanty means will permit. The Bryn Mawr exhibit, case No. 80, at the extreme right of the hall, gives elaborate details and copies of the official publications of the members of the faculty and of students; these afford clear proof of the distinguished success which this young college has already achieved. Since its opening in 1885 it has appointed 96 resident fellows, 9 of whom have been English college women, 4 from each of the Cambridge colleges. At one time, indeed, it was the only place where such students could do advanced work after their Cambridge course. Of these 96 fellows, 18 are now engaged in post-graduate study, 30 in college teaching, and 26 in school teaching. The Bryn Mawr pictures show the characteristic American college system of buildings-no quadrangle, but detached halls in and around the "campus," as the park or grounds is called. The 300 students live in several separate houses, smaller dwellings being considered more restful for the girls. Here, too, games and physical training have been provided for, though in this respect it is the English colleges that have set the example.
The coeducational colleges appear in the general university exhibit. Chief among them are Radcliffe, Barnard, Michigan, and Chicago. The first of these is called the American Girton, connected as it is with Harvard, the American Cambridge. Barnard is an annex of Columbia, the metropolitan university of New York. Michigan and Chicago are true types of coeducational universities as we know them in Manchester, Birmingham, and Wales. The former was the first to open its doors to women. It is a typical Western seat of learning, supported out of public funds
and governed by regents appointed by the State. It, too, gives the visitor a happy impression of the combination of simplicity and freedom with study. Chicago, on the other hand, is modern, rich, and splendid in buildings and endowments, unconnected with the State, and devoted especially to advanced post-graduate study. It is intended to be one of the greatest universities in the world, and its progress has been as rapid as that of the city whose name it bears. Theology and Semitic studies receive particular encouragement, and English women go to the university, as to Bryn Mawr, for higher study after finishing their college course here. Its own exhibit, case 65 and section 77, must appeal with peculiar force to citizens of a great British center of commerce and industry, whose university college has also been created and endowed by the munificence of private individuals, and we may contrast with interest its stately range of buildings with those of the Owens College. It remains but to notice illustrations of the university extension and summer school movements, and of recreative classes and social settlements in America. These are to be found in case 103, and several have special relation to women. There is also a noteworthy portfolio showing the work of college women for the home, accompanied by an explanatory pamphlet issued by the Association of Collegiate Alumnæ. This shows clearly the reaction of women's higher education on women's peculiar sphere of domestic duty, and proves what the advocates of this great reform of the Victorian era have always declared-namely, that education would make women better wives and mothers and housekeepers, and that no degree of culture was too high for the future makers of the home. "There is nothing to fear, but rather everything to hope, from the education of American women as to the stability of the American home, since the satisfactory solution of home problems is likely to come through it." And that this may be so in England we are already beginning to perceive in the concern shown by college women for household and technical home training and for practical investigation in social economics, as well as in their devotion to the problems of child study and upbringing in their own nurseries.
There are many lessons, as the vice-president of the board of education reminded us, which can be learned by English people from this exhibit. Those which he formulated-namely, the worth of an "all round" liberal education and the importance of nature-study-are perhaps aptest for a South Lancashire audience. Both concern women whose education in the past, and in some cases even in the present, has been limited to the technical preparation for their household duties, and who, when they did come to school, have often been crushed and oyerpowered with a too bookish and academic type of mental training out of all living relation to nature. But we venture to suggest that there is a more important lesson still to be derived from the exhibit, and one that all English people sorely need to learn; that is, a sincere and vital belief in the power and influence of education, combined with a determination to allow that influence and that power all the scope which the most unstinted use of public and private resources can secure for them.

## AMERICAN EDUCATION-LONGTON MASTERS AND THE EXHIbITION. ${ }^{1}$

The head masters of the science and art schools at Longton have presented interesting reports upon their visit to the United States education exhibit at Manchester. Mr. George George, of the Science School, says the system, unlike that in existence in England, does not consist of "two ends with no middle." The work done in the American kindergarten schools by children from 3 years to 5 years of age, and in the primary schools by those from 5 years to 8 years he considers of a very high educational character, in that the powers of observation, reasoning, and originality are constantly being developed. In the elementary or grammar schools, where the pupils are from 8 to 13 years of age, he was gratinied to find that our work here bears a strong resemblance to that in the American schools. At Longton, he maintains, they are much more up to date at the high school in the teaching of French. In drawing and manual training the Americans are far in advance of us, and the same applies to English composition. In this comnection we may quote from the annual report of the technical instruction committee of the county council recently noticed in the Courier. Speaking of the North Staffordshire mining classes, the lecturer and examiner says: "For some reason or other the subject I find exceptionally weak in this district is English." Again, in the same report, the instructor in pottery and porcelain manufacture says: "The remarkable and regrettable deficiency of elementary knowledge of arithmetic and the English language has been very marked in the
cases of many students in the preliminary grade." Mr. George considers America far behind us in science teaching of pupils from 13 to 17 years of age. Chemistry and physics, he says, are taught in an antiquated and scrappy manner. In mathematics, composition, geography, and history, however, America leads the way. He was surprised to find the large amount of time devoted to Latin compared with that given to experimental science. On the whole, he admits the superiority of the United States educational system, due to its continuity and the fact that no expense is spared upon buildings or equipment. A feature of especial interest in the American system is that in over 80 per cent of the schools boys and girls are educated side by side. Mr. W. Morse, the Longton art master, points out the advantage the Americans have in the fact that one grade of school leads to another. They also realize that it is thought in drawing that counts. They do not make servile copies, but learn to observe facts. Even in the kindergarten schools they draw from a cast or living objects, also from memory, to cultivate the power of observation. Drawing enters more into the ordinary work than it does here. They are not so good in design as we are. In the normal schools, where the work is similar to that required for our art teachers' certificates, Mr. Morse considers the standard far below ours. After all, the comparisons drawn by these two experts will not be altogether discouraging to Longton educationists.

THE EDUCATIONAL EXHIBIT OF THE UNITED STATES OF AMERICA AT THE PARIS EXHIBITION OF 1900.

## By Mr. J. H. Reynolds, Director of Technical Instruction, Manchester.

The technical instruction committee of the city council of Manchester having received from its chairman and director highly favorable reports of the great intrinsic merits of the educational exhibit of the United States, and being persuaded that its display in this district would prove of the greatest possible interest and stimulus to the intelligent public, and especially to all who are engaged in the work of education, publicly or privately, of whatever grade, either as administrators or as teachers, entered into negotiations with the United States Commission in Paris with a view to obtain its sanction for the removal of the exhibit for a limited time to Manchester.

The application of the committee was most cordially entertained, and the various contributors gladly gave their permission for their respective exhibits to be included in the display.

The aims of the French authorities. - It may be interesting to set forth the aims the French authorities had in view in the arrangements they made for an adequate display of the educational means, methods, and resources of the great, and some of the less important, nations of the world. In the first place they "recognized more fully than ever before the educational possibilities of a great international display, and the existence of an intimate relation between the growth of educational systems and the increase of commercial and industrial prosperity," and they gave emphasis to the view by placing it first among the great groups into which the classification of the Exposition was divided. Moreover, this prominent position was conceded and assigned to education because, as the French commissioner-general stated, "Through education and instruction man enters into life, and because they are also the source of all progress."

The view of the French commissioners with respect to education in the United States.The French commissioners were especially anxious that the United States should spare no effort to make its exhibit full and effective, since they regarded the systems of education there prevailing as more practical than those of any other country, and well worth the close study of the French educational authorities with a view to the adoption of any methods which seemed suitable to the genius and educational needs and aims of the French people.

The display by the United States.-It may be stated without invidiousness that no nation, other than France herself, made so fine a display as did that of the United States. The space occupied by the States was about 3,100 square feet, but this limitation, narrow as it was, was probably the chief cause of the efficiency of the display; since having regard to the vast area of the country and its diverse conditions of climate, people, industry, and social needs, the advisory committee were obliged to make a close study of the best methods of securing an exhibit which should adequately reflect the state of education in all its grades and variety.

The policy adopted by the commission.-The comparatively small space assigned to so large a territory as the United States, with its complex educational problems
and novel educational experiments, and with its numerous institutions munificently founded and supported by private and public endowment, compelled the adoption of a clearly defined if limited scheme. There was no space for repetitions and none for a retrospective display.

The exhibit is therefore of education as it exists in the States to-day. It is, moreover, distinctly national, and individual States find no recognition as such. Its purpose is to represent the best work and the ripest methods, no matter whence their source, within the limit of the United States.

With a view to secure an effective exhibit, an advisory committee was appointed by the National Educational Association under the general control of the United States Commission, comprised of the chief educational authorities of the Republic, public and private, including State and city superintendents of education, representatives of colleges and universities, private and denominational schools, normal schools, libraries, special classes, and the arts.

The executive arrangements were assigned to a committee of five, with Mr. Howard J. Rogers, deputy superintendent of education of the State of New York, as director, who has admirably fulfilled the duties intrusted to him.
A clearly defined scheme was formulated, in the accomplishment of which the most willing assistance has been given by every educational organization appealed to, whether that of a college or university or of the educational executive of a great city. All alike have been animater with the purpose of exhibiting as faithfully as possible the school and college system of the nation as a whole. "If you will tell us what you need, or what you want from us in any department of the university, we will prepare it for you, whether it is much or little," said the president of a prominent Eastern university. All who were appealed to met the requirements of the commission in the same patriotic spirit, with the result that there has been got together a quite unique exhibit which in small compass reflects the educational conditions and achievements of a great nation, and at the same time, in consequence of its carefully systematized arrangements, permits of exact and fruitful study.

The field covered by the exhibit.-The number of exhibitors was 252, covering the whole field of education, comprising (i) elementary education, including kindergartens, elementary schools, and elementary courses for adults; (2) schools for defectives, and for negroes and Indians; (3) the various departments of secondary education, including general, industrial, and commercial education; (4) trade schools; (5) higher education, including colleges, universities, and professional schools.
Methods employed to display the exhibit.-The means employed to bring before the eye an effective representation of the conditions and results of education in the various institutions, cities, and States selected is:
First. By an admirable system of statistics, charts, and graphic diagrams and tables.
Second. By the effective use of photography in displaying school and college architecture, interior and exterior, giving at a glance the liberality of the provision made in buildings, in furniture, and in equipment, and also giving the opportunity of studying the personnel of teachers and pupils. Photography is also largely used to display the meihods of teaching employed and the results achieved.
Third. By a display of students' work in all grades.
Fourth. By an admirable series of nineteen monographs (which have been freely circulated) upon various educational topics, prepared by experts under the general editorship of Dr. Nicholas Murray Butler, of Cohumbia University, New York, in which a complete résumé of the educational conditions of the United States at the end of the nineteenth century is given.
States, cities, and institutions contributing.-The elementary and secondary educational work has been chiefly contributed by the following eight cities: Boston, New York, Newark, Albany, Chicago, St. Louis, Omaha, and Denver, thus reflecting the educational conditions both East and West, and by the two important States of New York and Massachusetts.

Other localities have contributed exhibits of a special character, but the systematic, continuous development of elementary and secondary education in the States depends chiefly upon the above-named cities and States.

Character of the contributions.-In the field of higher education the national rather than the institutional standpoint has been accepted, and in consequence the exhibit has been arranged by subjects-the various institutions loyally responding to the wish of the advisory committee in this respect. Thus, for example, Harvard contributes exhibits in astronomy; the University of Pennsylvania in archæology; Johns Hopkins in physics and biology; Chicago and Columbia in language and literature; Wellesley in psychology; Bryn Mawr and Princeton in graduate work; Wisconsin in history; Yale in paleontology; Cornell and the Massachusetts Institute of Technology in engineering and architecture.
$\begin{array}{lllllllllllllllll}82 & 83 & 84 & 85 & 86 & 87 & 88 & 89 & 90 & 96 & 97 & 98 & 99 & 100 & 101 & 102\end{array}$


Hali the entire space is given to elementary and secondary education and half to higher education. Of the former, 5 per cent is assigned to kindergarten work.

The striking success of the exhibition is well indicated by the fact that the international jury have awarded to it 43 "grands prix," 63 gold medals, 40 silver medals, 18 bronze medals, and 9 "honorable mentions."

Opening of the exhibition in Manchester.-The exhibition will be formally opened by Alderman James Hoy, chairman of the technical instruction committee, on Tuesday, the 29th of January, in the Central Higher Grade Board School, Whitworth street (kindly lent for the occasion by the Manchester school board), and from that date forward will be open each day from $10 \mathrm{a} . \mathrm{m}$. until $9 \mathrm{p} . \mathrm{m}$. until the end of February, and possibly for a longer time it the public interest be maintained.

The technical instruction committee of the city freely invite all who are interested in education to take advantage of the opportunity to study this fine and well-arranged exhibit. It has been collected under the profound conviction that such a school system as is here illustrated has most materially assisted in producing a type of citizen self-reliant and well equipped, able to aid the nation in every emergency, and to demonstrate that the existence of such is not the fortune of chance conditions, but the inevitable result of free institutions wisely directed.

From this point of view, and having regard to the heavy responsibilities which rest upon this nation for the due training and elucation of its future citizens in order to meet the growing stress of competition in all the activities of life, it is earnestly to be hoped that such inspiration as the exhibit can give will not fail of its effect.

Prefatory statement and catalogue.-With the purpose of enabling visitors to grasp the significance of this finely conceived and well-arranged display of the educational resources of the United States and to assist those who are directly interested in certain features of it, it has been deemed desirable to indicate briefly the plan upon which it is laid out and the location of the chief exhibits.

A uniform scheme of arrangement is at once evident from the block plan which accompanies the catalogue, by means of which the gradual adrance from the kindergarten to the university can be readily followed.

The exhibit is arranged in departments as follows, beginning on the left hand of the room: (a) The kindergarten covering the ages from 3 to 5 , and the primary, the ages from 5 to 8. (b) The grammar-school grade (corresponding with our lower primary or elementary), ages from 8 to 13. (c) The high-school grade, ages from 13 to 17. (d) The commercial and industrial (trade) schools; the national schools fur defectives (the deaf, dumb, and blind); schools for Indians. (e) The colleges and universities (general). ( $f$ ) The colleges and universities (special). ( $g$ ) The medical schools and the technological high schools; university extension; architecture. ( $h$ ) The colleges and universities: (1) pedagogical instruction; (2) special research and publication work of the universities.

The exhibits are arranged in what may be described as winged cases, numbered consecutively from 1 to 111, containing light frames opening like the leaves of a book and showing on each side charts, drawings, samples of work, photographs of the exterior and interior of educational buildings; showing also the equipment of the class rooms and laboratories, and pupils and students at work. These rest on counters with glass cases containing models and other examples of students' work, while in the space or sections underneath are stored numerous portolios and yolumes corresponding to the case exhibits but giving a faller exposition of each class or section.

The attention of visitors desiring to give close study to particular departments is specially directed to these more abundant sources of information, while all who visit the exhibition are enjoined to take note of the fact that up to and including the high-school grades the instruction is free, and in some States the higher and the university instruction is also free or at quite nominal fees. The evening instruction in many of the large cities is also free. The school architecture and the fine equipment of the class rooms, laboratories, and workshops in the schools are specially worthy of note, while the large provision of appliances of the most efficient character for technological and art instruction and the great number of day students participating in it demands close attention.

The important question of the coeducation of the sexes receives abundant and marked illustration in the exhibit, and invites thoughtful consideration.

The remarkable and striking series of statistical charts distributed on the walls, in which is set forth in figures and diagrams the progress of education in all departments in the United States, deserves the most serious study.

The numbers in the catalogue correspond with those on the winged cases and strictly follow the order indicated in the foregoing paragraphs.

## Department A

1. Kindergarten schools; 3 to 5 years of age.

| Number. | Description. |
| :---: | :---: |
| 1 Case | Photographs and samples of work from Boston, Mass. |
| 2 Case | Photographs and samples of work from Rochester, N. Y., and Newark, N. J. |
| 3 Case | Kindergarten material and school aids by the Milton Bradley Manufacturing Company, Springfield, Mass. |
|  | Cases of kindergarten material. |
| Section. | 6 portfolios of kindergarten work from Boston. 5 portfolios of kindergarten work. |
|  | 2 portfolios of kindergarten work from Chicago. |

## 2. Primary schools; 5 to 8 years of age.

4 Case..
Section
5 Case ...
Section.
6 Case ...
Section.
7 Casc...
Section.
5, 6, 7 Sections
8 Case ...
9 Case..
Section
10 Case ....
Counter.

11 Case ....
Section.
12 Case ....
section
13 Case ....
Section
14 Case ....
15 Case ....
Section

16 Case ..
Section
17 Case ....
Scetion.

18 Case ...
19 Case...
Section.

20 Case .... Section

Photographs and specimens of work from Boston.
15 portfolios of pupils' work from Boston. First to fourth grade.
Photographs and specimens of work from Boston.
3 portfolios and 14 volumes of work of pupils. First to fourth grade.
Photographs and specimens of work from the public State schools of Massachusetts.
6 portfolios and 15 volumes of work of the first to fourth grades.
Example of work from the public State schools of Massachusetts.
15 volumes of specimens of the work of the public schools of New Jcrsey. First to fourth grades.
Reports of the board of cducation of the state of Massachusetts.
Photographs and specimens of work of the public schools of the State of New Jersey, First to second year.
Photographs and specimens of work from Albany, N. Y.
8 volumes of photographs and specimens of work from Albany. First to fourth grade.
Photographs and work from the sewing classes in the public schools of New York City.
Examples of work as above.
10 portfolios and 10 volumes of photographs and work from New York City public schools.
Specimens of drawing, New York City public schools. First to fourth year.
3 portfolios and 22 volumes of specimen work from New York City public schools.
Photographs illustrating physical training in the public schools of New York City.
2 portfolios as above.
25 volumesspecimens of work from New York City public schools.
Specimens of work, sewing and drawing, and pictures and photographs illustrating kindergarten and gymnastic classes, from the public schools of St. Louis, Mo.
5 portfolios of specimen work as above. First to eighth grades.
10 volumes specimens of work from public schools, New York City
Miscellancous photographs of schools in various cities of the United States.
Photographs and drawings illustrating the work in the public school: of the city of Chicago. First to third grades.
20 volumes as above.
5 portfolios showing photographs of public schools in Omaha, Nebr., and drawings. First to cighth grade.
Photographs of public schcols, city of Chicago, and specimen work. Third to fourth grade.
7 drawers showing work illustrating manual training, carpenters' school, city of Chicago.
Photographs, public schools of Denver, Colo., and drawings. First to fourth grade.
24 volumes as above. First to eighth grade.
1 portfolio, Wilkesbarre public schools, Pa., showing work of the elementary and high school grade.
1 portfolio, photographs of schools in Indiana.
20 volumes showing specimens of work in public schools of Pensacola Fla. First to eighth grade.
4 volumes illustrating sewing in the public schools, Denver.
Photographs and pupils' drawings in the p 1blic schools, Denver.
Course of nature study in the normal school, Philadelphia.
Course of study in the school of observation and practice as above.
30 volumes of specimens of work as above.
3 portfolios of photographs and specimens of work from the public high schools of Omaha.
Photographs and specimens of work from the normal school, Philadelphia.
Portfolios of miscellaneous photographs of life in California
Portfolio of drawings illustrating course in the manual-training sehool of St. Louis, Mo.
80 volumes of specimens of work from the normal school of Philadelphia.

## DEPARTMENT B

Giammar (elementary) schools; 8 to 15 years of age.

Description.

21 Case
Counter. Section

22 Case Counter. Section

23 Case Counter.

24 Case
Counter. Section.

25 Case
Section
26 Case . . .
Counter.
Section
27 Case ...
28 Case...
Section

29 Case Section

30 Case ...
Section
s1 Case ... Section

32 Case
33 Case ...
34 Case ...
Section
35 Case
Section
6 Case
Section
37 Case ...
Section

38 Case
39 Case ...
40 Case ...
Section

1 Case
section

Photographs of school buildings, school rooms, and classes, in the city of Boston
specimens of manual training, woodwork, city of Boston public schools.
18 large portfolios of drawings from the public schools, Boston.
2 portfolios of drawings from the free evening industrial drawing schools, city of Boston.
Photographs of school buildings and specimens of drawing from Boston.
Specimens of manual training, metal work, from city of Boston public schools.
4 portfolios of drawings from the state schools, Massachusetts.
22 volumes of specimens of work from the pubiic schools, city of Boston.
Drawings from the State schools of Massachusetts.
Specimens of manual training (wood).
4 portfoliosof drawings and examples of design from the State schools, Massachusetts. 28 volumes as above.
Specimens of drawing as above.
Specimens of manual training as above
4 portfolios of drawings and designs as above
30 volumes of examples of work as above.
Specimens of drawings as above.
4 portfolios as above.
28 velumes as above.
Specimens of drawing from the public schools, New Jersey
1 portfolio of drawings of manual training from the high school of Whitehall. N. Y.
18 rolumes specimens of work from the public schools. New York.
Photograohs of the public schools and drawings from Albany, N. Y.
Photographs of manual training schools, class rooms, and of manual-training work from New York City public schools.
5 portfolios of photographs and work from the vacation public schools of New York City.
34 volumes specimens of work from the New York City schools.
Drawings from the public schools of New York City.
8 portfolios as above.
25 volumes of work as above.
Photographs of pupils engaged in sewing exercises, and samples of work from the public schools, New York City.
3 portfolios showing cookery instruction in public schools, New York City
34 volumes as above.
Photographs of exercises in physical training, public schools, New York
4 portfolios as above.
32 volumes specimens of work
Photographs and specimens of work from various public schools in the United States Photographs of class rooms and of pupils' work from the public schools, city of Chicago.
Specimens of pupils' work, city of Chicago.
7 drawers containing specimens of manual training, carpenters' manual-training school, city of Chicago.
Examples of drawing, public schools of Denver, Colo.
4 portfolios of dra wings and photographs of school buildings, city of Chicago.
50 volumes of specimen work as above.
Drawings from the public schools, Denver, Colo.
Miscellaneous reports of various public schools.
Chart of school statistics, New York State.
4 portfolios, department of public instruction, city of New York, showing plans of school buildings.
20 volumes showing specimens of sewing.
Photographs of public schools in various cities of the United States.
Photographs illustrating free evening instruction in industrial schools in the city of Boston, together with drawings.
Instrumental drawing in the public high schools of Boston.
2 portfolios of drawings from the free evening industrial schools.
9 portfolios illustrating courses of study in drawing in the public schools of Boston.
7 volumes of photographs illustrating buildings and classes at work in the State schools of Massachusetts.
3 volumes illustrating normal schools.
Drawings from the public schools of New Jersey.
1 portfolio of drawings from the free evening schools of Boston.
1 volume illustrating the high school of Worcester.
7 portfolios of drawings, city of Boston industrial drawing school.
1 volume photographs of graduating classes.
7 volumes photographs of school buildings in the State of Massachusetts.
3 volumes illustrating child study in the normal schools, State of Massachusetts.

Above the cases are examples of woodwork done in the public schools of the State of Massachusetts, and photographs and drawings of the public schools.

Department C.
High schools; 12 to 17 years of age.

| No. | Description. |
| :---: | :---: |
| 42 Case .... | Photographs of classes in physics, and drawings from high schools in New York City. |
| Counter. | Lantern slides from manuaj-training high schools, showing subjects of instruction; chemical preparations showing courses in chemistry, from New York City high sehools. |
| Section . | 1 volume drawings, city of Chicago high schools. <br> 8 volumes specimens of work from various schools in the United States. <br> 14 volumes specimens of pupils' work, city of New York high schools. |
| 43 Case | Drawings and designs from the public high schools, Albany and New York. |
| Counter. | Mineral and chemical preparations, high schools of New York City. |
| Section. | 2 portfolios, drawings from the city of Chicago high schools. 28 volumes specimens of work, high schools of Albany. N. Y. |
| 4t Case ... | Photographe oi schools and school rooms, with exhibits of school work from the city of Chicago. |
| 15 Case | Examples of drawings and designs from the public high schools of Denver, Colo. |
| 46, 17 Cases . . | Photographs of school buildings, rooms, and pupils from various cities of the United States. |
| 18 Case | Collection of pictures published by the Perry Company, for use in schools. |
| 49,50 Cases. | Photographs of national public schools, exterior and interior, and of pupils of Washington, D. C. |
| 51 Case. | Photographs snowing pupils at work in the national high schools. . |

Above the cases are frames illustrating courses of study in the various schools, and on the screen, statistics of school savings banks. Around it are displayed drawings from art schools.

## Department D.

Schools for commercial and industrial education, schools for defectives (deaf, dumb, and blind), and national schools for Índians.

| No. | Description. |
| :---: | :---: |
| 52 Case | Photographs of commercial colleges and schools, of students at work, and of exam- |
| Section. | ples of courses of instruction from various cities of the United States. 2 portfolios of photographs and specimens of work from commercial colleges as above. |
|  | 39 volumes of specimens of work from various commercial colleges in the United States. |
| 53, 54 Cases ... | Photographs of the workshops of the New York trade schools, with charts of the courses of instruction. |
| Section. | 4 portfolios of the work of business colleges. |
| 55 Case .... | Photographs of the buildings and pupils of the national institution for defectives in Washington, D. C. |
| 55 Case | Photographs of the State school for defectives, State of Pennsylyania. |
| Cominter. | Appliances used for the instruction of the blind. |
| Sectioñ. | 10 volumes illustrating the Horace Mann School for Defectives, city of Boston, and other schcols for defectives in the United States. <br> 30 volumes text-books for the blind. |
|  | 11 portfolios of specimens of work by blind students. |
| 57 Case | Examples of sewing from the national Indian schools. |
| Section. | 11 reports of the superintendent of instruction for the blind from various schools. |
| 58 Case .... | Photographs of lndian village schools and scholars in the various Indian reservations, and specimens of the students' work. |
| Counter. | Specimens of work in manual training from the national schools for Indians. |
| Section . | 20 volumes of specimens of work from the above schools. |
| 59 Case | Sewing and lace work, national schools for Indians. |
| 60 Case | 40 volumes Report of the United States Bureau of Education. |
| 61 Case | 85 reports on education of different States in the Union, issued by the United States Bureau of.Education. |
| Counter. section. | Photographs and publications illustrating the various national schools for Indians. 45 volumes statistical returns from schools in the various States in the Union, issued by the United States Buread oif Education. |
| 62 Case ... | Photographs showing the exterior and interior of the Congressional Library, Washington, D. C. |
| Section . | 1 portfolio of forms and pamphlets used in the Congressional Library. |

Above the cases are examples of manual training work from the Manual Training School of st. Louis, Mo., and examples of work by Indians.

## DEPARTMENT E.

Universities and colleges.

Number.

63 Case .... Section .

64 Case...
65 Case ....
66 Case ....
67 Case .... Counter. Section.
68 Case .... Section.
69 Case ....
70 Case .... Counter.
71 Case... Seetion.
72 Case...
Section
Photographs of games and typical sports of American colleges and universities. 2 portfolios of the buildings, University of Colorado.
2 portiolios of the buildings of the Rutgers College, New Jersey.
Photographs of the exterior and the interior of various colleges of the United States. Charts and photographs of the exterior and interior of the University of Chicago. Photographs oif the halls, buildings, and grounds of Prineeton University, New Jersey. Photographs of charter and charts of studies.
Medals, seals, arms, and publications relating to the history of Princeton University. 50 volumes of magazines, Princeton University.
Photographs of the exterior and interior of the Peabody Museum, Harvard Uriversity. 20 volumes publieations of various universities.
Photographs and charts of studies, Harvard University.
Photographs of exterior and interior of baildings, University of Pennsylvania.
Text-books of Stern's School of Languages.
150 photographs of designs, proposed University of California.
4 portfolios of university buildings and class rooms, University of California.
Association of collegiate alumnæ, charts and photographs of various women's collcges, and photograph of sports and students in women's colleges.
1 portfolio of stature measurements and photographs of composite statues of the iypieal Ameriean student.
50 publications of graduates of women's colleges.
( 73 to 79 follow on page 1708.)

Department F.
Universitics and colleyes-Continued.

## Number.

Deseription.

80 Case.
Charts and photographs of the interior and exterior of Bryn Mawr Women's College, Pennsylvania. Above are articles by the faculty. 48 publications of graduates from Bryn Mawr.
81 Case
82 Case Charts and courses of study in history and economies, University of Wiseonsin.

83 Case .... Continuation of the foregoing.
Photographs of instruments and of astronomical stations in California, Peau, and Chile.
Counter.
81 Case .
85 Case ....
Counter.
Section.
86 Case ....
Counter.
Photographic transparencies of star elusters and speetra of stars, electrieally illuminated.
Photographs of astronomical phenomena.
Geological maps and drawings, Johns Hopkins University.
1 portfolio, Yerkes Observatory of University of Chicago.
1 portfolio, Lick Observatory, Mount Hamilton, California.
Publications of Johns Hopkins University.
Drawings and photographs illustrating anatomical work, Johns Hopkins University. Diffraction gratings of Professor Rowland.
Publications, modern languages, and philological journal, Johns Hopkins University.

Counter.
Section.
88 Case ....
89 Case ...
90 Case ....
Section.
91 Case...
92 Case...
93 Case.

87 Case .... Physiological eharts and photographs, Johns Hopkins University
The Claldean flood tablet and Hebrew texts.
Pablications, mathematical journals, and historical studies.
Photographs illustrating palacontology, Yale University.
Drawings illustrating course of study in the State Normal Art School, Massachusetts, Illustrations of the work of the Art Students' League of New York. ${ }^{1}$ 5 portfolios containing the work of the Art Students' League.
Photographs of the interior of the Art Institute of Chicago, with specimens of students' work and seventy large cartoons.
Statistics and charts of the divinity school, Harvard University. Statistics and charts of the law school, Harvard University.
${ }^{1}$ Teaehers and students of art may be directed to further illustrations by the attendant.

Department $G$.
Medical schools, technological institutions, university extension, and architecture.

| Number. | Description. |
| :---: | :---: |
| 94, 95 Case | Dental exhibit-lost at sea. |
| Counter. | Chemical preparations, University of Wisconsin. |
| Section | Publications of the University of Cornell. |
| 96 Case | Charts of medical, dental, and veterinary schools, Harvard University. |
| 97 Case | Photographs of the interior and cxterior of Cornell University, with charts and statistics |
| 98 Case | Photographs of Sibley Enginecring College, Cornell University. |
| Section | 8 large portfolios of engineering and architectural plans and drawings, Cornell University. |
|  | 25 volumes, publications of Cornell University. <br> Photographs of class rooms and laboratories, statistical charts, Massachusetts Institute of Technology, Boston. |
| 100 Case | Photographs of steam and hydraulic testing laboratorics. |
| Scetion | 6 portfolios of drawings, plans of mining, metallurgy, naval architecture, mechanical and clectrical engineering, illustrating the various courses of instruction in the Massachusetts Institute of Technology, Boston. |
| 101 Case | Photographs of laboratories, Massachusetts Institute of Technology, Boston. |
| 102.. | Charts of courses ot instruction connected with university extension. |
| Section | Exhibit of the American Society for the Extension of University Teaching. |
| 103 Case | Portfolio of Normal Kindergarten Institution at Chautauqua. |
|  | Views of Chautauqua, N. Y., showing system of teachers' summer schools. |
|  | Photographs of the exterior and interior of Pratt Institute, Brooklyn. |
|  | Photographs, Rochester Athenæum and Mechanics' Institute; People's Institute; Cooper Union, illustrating courses of free lectures; Yonkers Institute for Women; Westminster House Social Settlement; Women's Educational and Industrial Union, New York. |
| Counter. | Catalogue of Brooklyn Institute of Arts and Sciences. |
| 104.......... | Wall architectural drawings, Massachusetts Institute of Tcehnology, Boston. |

Above the cases F and G are frames of photographs of spectra.
Above F are frames of photographs of star clusters and other celestial phenomena. Frames are shown illustrating geology, biology, palæontology, Biblical research as examples of university work, and charts of divinity and law schools.

Department H (1).

Number.
Description.

73 Case ...
74 Case ...

76 Case....
77 Case ...
Section
78 Case.
79 Case ....
Counter.
Section

75 Case .... Photographs illustrating archæology and palæontology, foreign section, Free Museum, University of Pennsylvania.
Photographs illustrating archæology and palæontology, Egyptian and Mediterranean section.
Photographs illustrating excavations at Nippur, Babylon, undertaken by the University of Pennsylvania.

As No. 75, but illustrating the American section.
12 publications, University of Pennsylvania. 135 volumes issued by the University Press, of Chicago. 50 publications of the University of Chicago.
Charts illustrating course of psychological study and photographs of the exterior and interior of Wellesley College for Women.
Views of buildings and library, exterior and interior, University of Columbia, New York City.
2 portfolios containing views of college buildings, University of Columbia, New York City.
92 volumes published by Columbia University.

Medical schools, tcchnological institutions, university extension, and architecture-Continued.
Department H (2).

| Number. | Description. |
| :---: | :---: |
| 105 Case | Photographs of exterior and interior of State Normal School at Oswego, with students at work and relief maps prepared by students. |
| Section | 28 volumes of students' work and notebooks. |
|  | 1 volume child study of pedagogical investigation, city of Chicago. |
| 106 Case | Charts illustrating courses of study, State Normal Training School, Potsdam, N. Y. |
| Counter. | Portfolio of photographs of class room, Normal Training School of Potsdam. |
|  | 2 large portfolios illustrating normal instruction, Potsdam, N. Y. |
|  | 28 volumes, Westfield Normal School. |
|  | 7 volumes teachers' work, State Normal School. |
|  | 100 sketches and photographs for the illustration of theses by teachers. |
| 107 Case | Photographs of various normal schools in the United States. |
| 108 Case | Photographs and charts describing courses of study in pedagogy, University of New York. |
| Section . | 5 large portfolios illustrating courses of study in the School of Pedagogy, University of New York City. |
| 109 Case | Photographs of laboratories, charts of courses of instruction, Teachers' College, Columbia University, New York City. |
| 110 Case | Photographs and charts illustrating course of instruction in the schools of observation and practicc, Teachers' College, Columbia University, New York City. |
| Counter. | Normal training work and publications of Teachers' College, New York. |
| 111 Sastion . | 20 volumes illustrating palæontology, state Museum of Albany. <br> Photographs and charts illustrating course of psychological instruction in Columbia University. |
| Counter. <br> Section. | Measuring apparatus used in psychological investigations in Columbia University. 22 volumes of reports of superintendent of public instruction, New York State. 100 volumes of reports of superintendents of schools throughout the United States. 25 volumes of forms and certificates used in school administration in various cities of the United States. |

Above the cases are colored drawings of prehistoric masks from Florida, photographs of Columbia and lowa universities, and charts of Chicago University.

## CHAPTER XXXI.

## EDUCATION IN FRANCE.

France, Republic: Area, 204,082 square miles; population, 38,517,975 (1896).
PREVIOUS ARTICLES.
The educational system of France. (Report, 1888-89, Vol. 1, pp. 112-149.)
Report of the educational congresses and exhibition held in Paris, 1889. (Report, 1889-90, Vol. 1, pp. 41-186, by W.H. Widgery.)
Brief view of the educational system, with statistics for 1888-89. (Report, 1889-50, Vol. 1, pp. 249-261.)
Elementary education in London and Paris. (Ibid., pp. 263-280.)
Education in France: Statistics, 1880-91; progress of primary schools since Guizot's law, 1833; higher primary and classical schools of France. (Report, 1890-91, Vol. 1, pp. 95-124.)
Education in France: Outline of the system, and statistics for 1892; State faculties; proposed transformations and development of teaching functions. (Report, 1891-92, Vol. 1, pp. 73-95.)
Civil service in France, by W. F. and W. W. Willoughby. (Ibid., pp. 369-412.)
Education in France: Outline view, with current statistics; inspection of infant schools; recent changes in the baccalaureate; reorganization of medical studies and of the scientific course preparatory thereto. (Report, 1892-93, Vol. 1, pp. 219-237.)
Education in France: Statistics for 1891-1893; recent modifications in secondary and superior education; progress of the system of primary instruction; schools for adults; movements for the admission of American students to the universities of France. (Report, 1894-95, Vol. 1, pp. 289-312.)
Education in France: Statistics for 1894-95; summarized view of primary schools; proposed modifications of secondary institutions; the law of July 10, 1896, transforming the State faculties into universities; status of medical students in France, with special reference to foreigners; Dr. Alcée Fortier on the French lycées. (Report, 1895-96, Vol. 1, pp. 611-639.)
Education in France: Statistics, current and comparative; opening of the universities under the law of July 10, 1886; the new doctorate open to foreigners; state secondary schools vs. church establishments; the law of July, 1893, respecting salaries of teachers of primary schools; the superior primary schools, progress, organization, and scope; M. Boutmy on the reform of the baccalaureate; M. Bréal on the study of Greek. (Report, 1896-97, Vol. 1, pp. 29-70.)
Education in France: Statistics, 1896; the decentralizing movement; the reconstruction' of the universities; efforts for strengthening the moral influence of the schools; temperance instruction; manual training and technical schools; report of Mr. Charles Copland Perry on technical education in France; the admission of American students into French universities; review of the career of M. Victor Duruy, minister of public instruction, 1863-1869, by the Duc de Broglie; review of the work of M. Henri Marion, first professor of the science of education at the Sorbonne, by M. F. Buisson. (Report, 1897-98, Vol. 1, pp. 691-788.)

System of public education in France-Summarized statistics-Current record of the universities organized under the law of 1896-Tabular view, 1887 and 1897Admission of foreign students to French universities-The University Doctorate created under decree of 1897-Review of the work of the Republic in respect to primary education, by M. Maurice Faure-Antialcoholic instruction in French schoolsMovement for prolonging education-Statistics of illiteracy-Congress of secondary professors-Commission of inquiry appointed by the Chamber of Deputies-Scope of inquiry and depositions of M. Gréard, vice-rector of the Academy of Paris, the Abbé Batiffol, MM. Levasseur, Berthelot, Lavisse, Michel Bréal-The educational system of the Christian Brothers: Deposition of Brother Justinus, general secretary of the Order of the Brothers of Christian Schools. (Report 1898-99, Vol. 1, pp. 1086-1138.)

TOPICAL OUTLINE.
Brief conspectus of the system of education in France-Summarized statistics 1897-98-Detailed statistics of primary schools, current and retrospective-Secondary education: Relative enrollment in State and private secondary schools; Government solicitude at the transfer of students from State to clerical schools; Proposed reform of State secondaries; Public lycées and colleges for girls-Universities: Recent reorganization and development; Comparative statistics-The Congress of primary education.

## BRIEF CONSPECTUS OF THE PUBLIC SYSTEM OF EDUCATION IN FRANCE.

Public education in France forms a department of public affairs under the direction of a cabinet officer-the minister of public instruction and fine arts (present incumbent, M. Georges Leygues).

The control of the minister is exercised through a graded series of appointed officials belonging to the central administration or to the academies ( 17 in number, including 1 in Algiers), which are the local subdivisions of the system. Public instruction is a state service, professors and teachers constituting a professional order whose qualifications, duties, privileges, honors, emoluments, and penalties are as rigidly fixed by law as those of other branches of the civil or those of the military service.

Professional judgment and experience are brought to bear upon the conduct of the system through the councils, i. e., the superior and academic, the majority of whose members are chosen by their peers from the several teaching orders.

The public scholastic institutions are grouped in three classes-superior, secondary, primary-corresponding to three departments of the central administration. The affairs of each are separately administered by a director and his assistants. As a rule these directors retain their positions irrespective of cabinet changes, and form with the superior councils a permanent factor in the administration. On the scholastic side the cecondary and superior institutions are closely coordinated. The course of study of the primary schools is also made continuous with the modern course of the secondary schools.

To the department of superior instruction (director, MI. Liard) belong the universities and those special schools of high order which are under the minister of education. ${ }^{1}$ Paris is the seat of these special schools and also of the principal university. Under the law of 1896 fifteen of the former faculty groups have been organized into independent universities. They registered 28,254 students in 1899, an increase of 10,649, or 60.5 per cent above the number enrolled in the faculties in 1888.

[^91]The professors of the State universities are appointed by the President of the Republic in advice with the minister of public instruction. The choice is made from two lists, one furnished by the university council, the other by the superior council. The salaries of professors are paid by the State and they have right to a pension.
To the department of secondary instruction (director, M. Rabier) belong the lycées, or State classical colleges, for boys, the State lycées for girls, and the communal colleges established by the communal or local authorities and aided by the State. In 1898 the lycées for boys numbered 109 and enrolled 51,892 pupils. The communal colleges numbered 227, with an enrollment of 32,510 . This gives a total of 84,402 boys in the public secondary schools. The church secondary schools for boys enrolled the same year 91,140 pupils, and private secular secondary establishments for boys, 9,725.

The public lycées and colleges for girls had an enrollment the same year of 11,402 students. The attendance upon convent and private secondary schools for girls is not known.
The professors of secondary instruction (public) are appointed by the minister of public instruction. Their salaries, like those of the professors of superior instruction, are paid by the State, and they are also borne on the pension list.

To the department of primary instruction (director, M. Bayet) belong the infant schools (écoles maternelles), the superior primary and elementary primary schools, and the primary normal schools.

The chief local officer of primary education under the rector of the academy is the academic inspector appointed by the minister. Primary inspectors, 450 in number, or about one for every 150 schools, are subordinate to the academic inspector. They come into the most intimate relations with the schools and teachers, as their province is the inspection of the individual schools. The 90 departments of France are districts of administration for primary education within the academies. The prefect or civil chief of the department has certain authority in respect to primary schools. In particular he appoints the full teachers (titulaires), although his choice must be made from lists approved by the academy inspector. The prefect is assisted by a departmental council composed of school inspectors, teachers, and members of the civil council, which gives advice upon matters relating to the primary schools.

The medical inspectors of communes and departments are charged with the sanitary inspection of schools. The only local authorities concerned with education are the communal councils and mayors, who select the sites for the school buildings and vote the funds for the expenditures at the charge of the commune, and local school committees (commissions scolaires) formed to encourage school attendance.

The primary normal schools, 87 for men and 85 for women, are established by the departments (laws of 1833 and 1879), but the salaries of the teachers of normal schools are paid by the State. In 1897 the normal schools enrolled 7,736 students ( 3,865 men, 3,871 women).

Every commune must establish at least one public primary school for children of the legal school age, 6-13 (law of 1833, confirmed by later laws). The establishment of schools for children under 6 years of age (écoles maternelles) and of superior primary (high) schools is optional with the communes.

Public primary schools of all classes are free (law of June 16, 1881) and secular (law of March 28, 1882), and only lay teachers may be employed in them (law of October 30, 1886). Instruction is obligatory for all children (law of March 28, 1882), but parents are free to choose the means. Parochial schools are thus recognized, although they are deprived of State support.

The enrollment in public primary schools (elementary and superior) in 1897 was $4,190,320$, a decrease of $5 \frac{1}{2}$ per cent below that of 1887 .

The enrollment in private primary schools, chiefly parochial, was $1,341,098$, a gain above 1887 of 23 per cent. The total enrollment in primary schools, public and private, in 1897 was, it thus appeared, $5,531,418$, equivalent to 14 per cent of the population.

No one is permitted to teach in any capacity in a public primary school unless provided with a State certificate. These certificates are the "brevet élémentaire," secured by examination or graduation from a normal school after a probationary term of service, the brevet supérieur and the "certificat d'aptitude pédagogique" both requiring examination and stccessful service.
The State pays a fixed annual salary ranging for full teachers in the elementary primaries from $\$ 200$ to $\$ t 00$ for men, and for women from $\$ 200$ to $\$ 320$. In addition to his salary, every teacher must be provided with a residence or with a money equivalent for the same. The law imposes this provision upon the communes and fixes the rates of indemnity for residences. Primary teachers may be retired upon a pension after reaching 60 years of age, if they have been in the service thirty years. The minimum pension is for men $\$ 120$ and for women $\$ 100$ annually (law of June 9, 1853).

Thie total State appropriation for the current expenses of public instruction in 1898 was $\$ 39,775,615$, of which amount $\$ 30,890,707$ was for primary instruction.

The appropriation voted for 1901 rose to $\$ 11,393,296$ ( $205,966,483$ francs), of which $\$ 31,426,215$ was for primary education.

In addition to the schools for general education under the control of the minister of public instruction, there are many special schools-technical, agricultural, commercial, and art-under the minister of agriculture or the minister of commerce, which, with numerous municipal technical schools, complete the public provision for education in France.

The state assumes no monopoly of education, and private institutions of all orders exist side by side with the public institutions, but the former are subject to the authorization of the minister and to his supervision with respect to moral and hygienic conditions.

Summarized statistics of schools and universities, 189\%-98.

|  | Date. | Enrollment. |  | Teachers. |  | Current expenditures. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Men. | Women. |  |
| Primary: |  |  |  |  |  |  |
| Ecoles maternclles (infant schools), ages 2 to 6 ....... .. | 1897-98 | (74.4, |  |  | 9, 414 |  |
| Élémentaires, ages 6 to 13 ; supérieures, ages 13 to $16 \ldots$.... | 1897-98 | 12, 777, 739 | 12,757,386 |  | 505) | 2 $\$ 12,803,050$ |
| Primary normal schools, ages 16 to 20 | 1897 | 3,878 | 3,707 |  |  | ${ }^{3} 1,702,293$ |
| Sccondary schools: Public, ages 8 to 20 . | 1897-98 | 4 86, 321 | ${ }^{5} 15,311$ |  |  |  |
|  |  | ${ }^{4} 100,865$ |  |  |  |  |
| Universities: Public | 1899 |  | ${ }_{6} 817$ |  |  | 2, 772, 01 |
| Private : | 1899 | 81,658 |  |  |  | -, 772,01 |

[^92]The statistics of enrollment presented in the foregoing summary (Table 1) are taken from the report of the chairman of the financial committee of the Chamber of Deputies and bring the record to a year later than the official statistics of primary schools published by the minister of public instruction, which bear date 1896-97. ${ }^{1}$ The statistics from the latter source are carefiully analyzed to show the relative growth of public and private schools, the latter belonging chiefly to the religious associations. The progress of the public system in respect to the conditions that make for effeiency are also emphasized in the official report. The salient features of the record are here reproduced and brought into comparison with past conditions by a series of retrospective tables derived from the report presented by M. Levasseur to the International Institute of Statistics (1891), and brought to a later date by the addition of later official statistics.

Enrollment in primary schools, France (including Algiers).-According to the report of the minister for 1896-97 the total enrollment in infant and primary schools in that year was $6,261,066$, or 16.2 per cent of the population. Omitting infant schools, the enrollment was $5,531,418$, distributed as follows:

|  | Public schools. | Private schools. |
| :---: | :---: | :---: |
| Secular: |  |  |
| Boys | 2,292, 639 | 48, 199 |
| Girls | 1,487, 766 | 83, 202 |
| Total | 3, 780, 405 | 131,401 |
| Belonging to religious orders: |  |  |
| Boys ................... | 25, 765 | 415, 943 |
| Giris | 384, 149 | 793,754 |
| Total. | 409,915 | 1,209,697 |
| Grand total. | 4,190,320 | 1, 341,098 |
| Per cent of total enrollment | 75.75 | 24.25 |

The relative proportions of pupils enrolled in public and in private schools at the beginning and close of the half decade covered by the report were as follows:


[^93]The relative increase in the enrollment in private schools is found wholly in schools conducted by the religious orders, and is attributed to the enforcement of the law of 1886 forbidding the employment in State schools of teachers belonging to the religious orders.

By reference to the retrospective table (II., p. 1718) it will be seen that the total school enrollment declined steadily (about $1 \frac{1}{2}$ per cent) from 1888-89 to 1896-97. The causes of this diminution given in the official report are (1) the actual diminution in the child population, which for children 6 to 13 years of age, the legal school period, was six-tenths of 1 per cent from 1891 to 1896 ; (2) the earlier period at which children are sent to school, as shown by the increase in the enrollment of the infant schools-that is, schools for children 2 to 6 years of age. While the population between these ages decreased by 1.6 per cent from 1891 to 1896, the enrollment in infant schools increased by 18.4 per cent in the same time. The children entered in school at this early age are removed at an early age in ever-increasing numbers. The change affects in nearly the same degree both boys and girls, who are about equally represented in the total enrollment. In 1896-97 the boys in primary schools numbered 2,782,547; girls, 2,748,871.

The statistics are carefully analyzed in the official report with a view to showing exactly how many children of the school age are not accounted for. In this inquiry Algiers, which since 1886 has been treated as an integral part of France, is omitted. The total number of children in France 6 to 13 years in 1896-97 was $4,636,381$. Of these $4,382,582$ were in primary or in infant schools, 70,092 in the primary departments of secondary schools, and 3,492 instructed at home. This gives a total of $4,456,166$ under instruction and leaves 180,215 children of legal school age not accounted for. The statistician adds to this 182,000 as the probable number of duplicate enrollments in the schools, and thus arrives at a total of 362,000 children of school age with respect to whose instruction the Government has no information. This number includes all children who are not entered in school till 7 or 8 years of age, all who leave before 14 years of age, and also all those instructed at home, but whose parents have not reported to the authorities, which is frequently the case in the large cities. The conclusion is reached that the actual number of children who are deprived of instruction is very small.
The item of average annual attendance is not included in the official statistics of French schools; but an enumeration of the pupils in attendance upon all the schools is made on a specified day in December, the month of highest attendance, and also on a specified day in June, the month of lowest attendance. The comparison of each total with the total attendance during the month gives an approximate idea of the
relation of attendance to enrollment. For 1896-97 the results were as follows:


These biennial estimates do not indicate with sufficient completeness the actual degree of regularity in school attendance.

The subject was discussed in the Congress of Primary Education ${ }^{1}$ held in connection with the Paris Exposition, and it was made very clear by the facts and opinions there presented that more effective measures are required to raise the average attendance to the desirable standard.

Enrollment in the higher primary schools.-Under the head of higher primary schools (écoles primaires supérieures), which were authorized by the law of 1833 , but whose establishment is optional with the communes, are comprised advanced classes annexed to an elementary primary school and independent schools installed in separate buildings and having their own directors. The annexed classes or courses, as they are called, can not comprise more than two years. The schools may have a course extended over three or more years, in which case they are termed complete (écoles de plein exercice).

To be admitted into a higher primary school a pupil must have reached the age of 12 years, and must have obtained the certificate of primary studies or pass an examination showing equivalent attainments, which examination is not open to candidates below 13 years of age. Promotion from class to class in the higher primaries is made upon the basis of a rigid examination, and pupils who fail in the same must either leave the school or stay another year in the division in which they have been studying.
The enrollment in the higher primary schools in 1896-97 included in the total already given for primary schools was as follows:

|  | Public schools. | Private schools. |
| :---: | :---: | :---: |
| Boys | 35,371 | 3,240 |
| Girls | 16,035 | 10,012 |
| Total. | 51, 406 | 13,252 |

${ }^{1}$ For report of the Congress see appended paper, pp. 1729-1732.

The grand total of students in these schools, 64,658 , shows an increase of 19,059 , or 41.8 per cent pupils above the total reported in 1891-92, viz, 45,599. Of the pupils enrolled in 1897, 590 boys and 1,006 girls Lad secured scholarships. Paris comprised nearly onefourth of the pupils enrolled in this grade of schools, viz, 15,693, of whom 7,228 were boys and 8,455 girls.

Table II.-Retrospectice view of pupils in the primary schools.

| Period. | Totalnumber of pupils. ${ }^{1}$ | Boys. | Girls. | Pupils in schools. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Public. | Private. | Secular. | Belonging to religious orders. |
| 1837 | 2, 690,035 | 1,579,888 | 1,110, 147 | 2, 046,455 | 643, 580 |  |  |
| 1840 | 2, 896,934 | 1,656, 662 | 1,240, 272 | 2, 216, 767 | 680, 167 |  |  |
| 1843 | 3, 164, 297 | 1, 812,709 | 1,351,588 | 2, 407, 425 | 756, 872 | 2,457,380 | 706,917 |
| 1847 | 3, 530, 135 | 2,176,079 | 1, 354, 056 |  |  |  |  |
| 1850 | 3, 322, 423 | 1,793, 667 | 1,528, 756 | 2,601, 619 | 720, 804 | 2, 368,627 | 953, 796 |
| 1861 | 4,286, 641 |  |  |  |  | 2, 744,667 | 1,541,974 |
| 1863. | 4, 336, 368 | 2, 205, 756 | 2, 070, 612 | 3, 413, 830 | 922,538 | 2, 72., 694 | 1,610,764 |
| 1865 | 4, 436, 470 | 2,306,792 | 2, 129, 678 | 3, 477, 542 | 958, 928 | 2, 763, 524 | 1,672, 946 |
| 1866. | 4,515,967 | 2, 343, 781 | 2, 172, 186 | 3, 537, 709 | 978, 258 | 2, 820,670 | 1,695, 297 |
| 1872. | 4, 722, 754 | 2,445, 216 | 2, 277,538 | 3, 835,991 | 886, 763 |  |  |
| 1875 | 4, 809, 728 | 2, 450,683 | 2,359, 045 | 4, 049, 953 | 759, 775 | 2, 938, 709 | 1,871,019 |
| 1876-77 | 4, 716, 935 | 2, 400, 882 | 2,316, 053 | 3, 823, 318 | 893,587 | 2, 648,562 | 2,068,373 |
| 1878-79 | 4, 869, 087 | 2, 478, 417 | 2,390,670 | 3, 982, 802 | 886, 285 | 3, 027, 560 | 1,841,527 |
| 1879-80 | 4, 949,591 | 2, 518, 401 | 2, 431, 190 | 4,015, 097 | 934, 494 | 3, 144, 938 | 1, 804, 653 |
| 1880-81. | 5, 049,363 | 2, 568,339 | 2,481,024 | 4,079, 968 | 969,395 | 3,276, 382 | 1,772,381 |
| 1881-82 | 5, 341, 211 | 2, 708,510 | 2, 632, 701 | 4,359, 256 | 981,955 | 3,567, 861 | 1,773,350 |
| 1882-83 | 5, 432, 151 | 2, 743, 564 | 2, 688,587 | 4,409,310 | 1,022, 841 | 3, 655,035 | 1, 777,116 |
| 1883- | 5, 468, 381 | 2,759,050 | 2, 709,631 | 4,421, 212 | 1,047,469 | 3, 701, 596 | 1,767,085 |
| 1881-8 | 5,531, 229 | 2,790, 169 | 2, 741,060 | 4,463, 372 | 1,067, 857 | 3, 778, 611 | 1,752, 618 |
| 1885-8 | 5, 585, 838 | 2, 823,964 | 2,761, 874 | 4, 502, 059 | 1, 083, 779 | 3,836,826 | 1, 749, 012 |
| 1886-87 | 5,596, 919 | 2, 829, 127 | 2, 767,792 | 4,505, 109 | 1,091,810 | 3, 877,185 | 1,719,734 |
| 1887-88 | 5, 616, 510 | 2, 837,524 | 2, 778, 986 | 4, 492, 894 | 1,123, 616 | 3, 901, 565 | 1,714,945 |
| 1888-89 | 5, 623, 401 | 2, 833, 218 | 2, 790, 183 | 4, 446, 851 | 1,176,550 | 3, 915,915 | 1,707,486 |
| 1889-90. | 5, 601, 567 | 2, 823, 877 | 2, 777,690 | 4, 405, 543 | 1,196,024 | 3, 896, 700 | 1,704, 867 |
| 1891-92. | 5, 556, 470 | 2, 805,849 | 2, 750, 621 | 4, 281, 183 | 1,275, 287 | 3, 900, 977 | 1,655,493 |
| 1895-96 | 5, 533, 511 | 2, 788,215 | 2, 745, 296 | 4,199, 727 | 1,333,784 | 3,898,806 | 1,634,705 |
| 1896-97. | 5, 531, 418 | 2,782,547 | 2, 748, 871 | 4, 190, 320 | 1,341,098 | 3, 911, 806 | 1,618, 612 |
| 1897-982 | 5, 535, 125 | 2,777,739 | 2,757,386 | 4, 177, 590 | 1,357,535 | 3,914, 352 | 1, 620, 773 |

${ }^{1}$ Infant schools not included. Algiers not included prior to 1886-87.
${ }^{2}$ From report of M. Maurice Faure for 1900.
Table III.-Movement of population, as shown at census dates, and ratio of enrollment in primary schools to total population.

| Year. | Total population. | $\begin{gathered} \text { Increase } \\ \text { or } \\ \text { decrease. } \end{gathered}$ | Children between 6 and 13, inclusive. | Increase or decrease. | Ratio to total population. | Ratio of enrollment in primary schools to total population. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1876 | 36, 905, 788 | Per cent. | 4,502,506 | Per cont. | $\begin{gathered} \text { Per cent. } \\ 12.2 \end{gathered}$ | Per cent. $12.78$ |
| 1881 | 37, 672, 048 | 2.1 | 4,586,349 | 1.85 | 12.17 | 13.97 |
| $1886{ }^{1}$ | 38, 218, 903 | +3.55 | 4,729, 144 | +5.03 | 12.4 | 14.46 |
| 1891 | 38, 343, 192 | $+0.32$ | 4, 639,526 | -1.89 | 12.1 | 14.49 |
| 1896 | 38,517, 975 | +0.79 | 4, 636, 381 | $+0.07$ | 12.03 | 14.37 |

${ }^{1}$ Algiers included for this and subsequent years.
Number and professional status of teachers.-The number of teachers employed in the several classes of primary schools in 1896-97 was as follows:

In infant schools, $9,41 \frac{1}{4}$; in elementary and higher primary schools,

152,277; total, 161,691. The teachers, exclusive of those in infant schools, were distributed as follows:

|  | Public sehools. | Private schools. |
| :---: | :---: | :---: |
| Lay: |  |  |
| Men. | 56,373 | 1,278 |
| Women | 40,385 | 5,500 |
| Total. | 96,758 | 6,778 |
| Belonging to religious orders: <br> Men | 3 | 9,685 |
| Women | 9,013 | 30,040 |
| Total | 9,016 | 39,725 |
| Grand total. | 105, 774 | 46,503 |

It will be seen from the above table thas the teachers belonging to the religious orders, in all 48,749 , form about one-third of the entire teaching corps ( 152,277 ), and further, that the number of women teachers exceeds but slightly the number of men teachers, the former being 55 per cent of the total.

Of the teachers employed in the public schools, 97 per cent on a total of 105,764 were possessed of diplomas and 43 per cent of the highest diploma (certificat d’aptitude pédagogique). The proportion of certificated teachers in the private schools was 87 per cent on a total of 46,503 .

The remarkable progress made by France in securing trained teachers for its public schools is due in great measure to the liberal provision of normal schools and the high standard at which these are maintained. Every department has complied with the law requiring the establishment of two normal schools, one for men and the other for women, or has been authorized to combine with another department for this purpose. The State shows its solicitude in this matter by the maintenance of two superior normal schools, one for men at St. Cloud, the other for women at Fontenay aux Roses, in which professors are trained for the primary normals. These two superior schools are really post-graduate institutions, requiring for admission either the higher diploma of pedagogy or a bachelor's degree.

The following statistics show the relative status of the primary normal schools at the beginning and end of the last half decade reported:

|  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { schools. } \end{aligned}$ | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { students. } \end{gathered}$ | Number of officers and teachers. |
| :---: | :---: | :---: | :---: |
| 1891-92. |  |  |  |
| Normal schools for men .... Normal schools for women. | 87 85 | $\begin{aligned} & 3,878 \\ & 3,707 \end{aligned}$ | 890 711 |
| 1896-97. |  |  |  |
| Normal schools for men.... Normal schools for women. | 87 85 | 3,865 3,871 | 897 852 |

The total number of graduates during the half decade 1888 to 1892 was, from the schools for men, 7,189 ; from the schools for women, 5,815. The corresponding numbers for the half decade 1893 to 1897 were, men, 6,199 ; women, 6,139 . Total for the decade, 25,142 , or an average of 2,514 annually.

Retrospective Table IV.-Number and classification of teachers of primary schoola at specified dates.

|  | Year. | Total number teachers. | Men. | Women. | Men and women. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Public. | Private. |
| 1837. |  | 59,735 | 39, 302 | 20,433 | 38, 465 | 21,270 |
| 1840 |  | 63, 409 | 40,504 | 22,905 | 40,843 | 22,566 |
| 1813 |  | 75, 535 | 47, 301 | 28,234 | 50, 446 | 25,089 |
| 1863 |  | 108,799 | 49,585 | 59,214 | 70, 441 | 38, 358 |
| 1872. |  | 110, 238 | 50,549 | 59, 689 | 75, 062 | 35, 176 |
| 1876-77. |  | 110, 709 | 51, 717 | 58,992 | 80,063 | 30, 646 |
| 1878-79 |  | 117,451 | 53,941 | 63,510 | 82, 343 | 35, 108 |
| 1879-80. |  | 119,870 | 55,182 | 64, 688 | 83, 581 | 36,289 |
| 1850-81. |  | 122, 760 | 56, 410 | 66,350 | 85, 451 | 37, 309 |
| 1881-82. |  | 124, 965 | 58, 137 | 66,828 | 88, 220 | 36,745 |
| 1882-83. |  | 129,637 | 60, 624 | 69,033 | 92,300 | 37, 357 |
| 1883-84. |  | 132, 580 | 61,654 | 70,926 | 94,784 | 37, 796 |
| 1884-85. |  | 133, 900 | 62,158 | 71, 742 | 95,810 | 38, 090 |
| 1885-86. |  | 137,000 | 63, 670 | 73, 330 | 97, 996 | 39, 004 |
| 1886-871. |  | 138,655 | 64,039 | 74,616 | 98,769 | 39,886 |
| 1887-88. |  | 141,063 | 64, 631 | 76, 432 | 100, 417 | 40, 646 |
| 1888-89. |  | 142, 660 | 65, 181 | 77, 479 | 100,913 | 41,747 |
| 1889-90. |  | 151,850 | 65, 312 | 86,538 | 106, 247 | 45, 603 |
| 1891-92. |  | 146, 674 | 66,363 | 80,311 | 102, 486 | 44, 188 |
| 1895-96. |  | 151, 563 | 67, 203 | 84,360 | 105,587 | 45, 976 |
| 1896-97. |  | 152, 277 | 67, 339 | 84,938 | 105, 774 | 46, 503 |
| 1897-98. |  | 153, 505 |  |  | 106,355 | 47,150 |

${ }^{1}$ For this and for subsequent years Algiers included.
Expenditure.-The total expenditure for primary education in 189697 amounted to $214,015,250$ francs $(\$ 22,803,050)$. This sum includes expenditure for primary normal schools and for infant schools, the current expenditure for the primary schools proper (elementary and superior) not being separately presented. On the basis of this total the expenditure per capita of enrollment in public primary schools (viz. 4,642,609, infant schools included), says M. Levasseur, is found to be 46 francs ( $\$ 9.20$ ). It is difficult to institute comparisons on this basis, because of changes in the financial administration since 1890, but this the statistician has attempted with results that are shown in the following table. These results, he explains, are not exactly comparable, but they establish beyond doubt the fact of steady increase in the per capita expenditure for the public primary education.

These estimates do not include the payment of interest on the moneys advanced for school buildings. If this item were included in the estimate for $1896-97$, it would raise the per capita expenditure to 56 franes (\$11.20).

The expenditure for private primary schools is not known, but on the supposition that it is relatively the same as for the public schools, the total annual expenditure for primary education is estimated by M. Levasseur as $293,000,000$ francs $(\$ 58,600,000)$, not including rentals, and including rentals, $350,000,000$ francs ( $\$ 70,000,000$ ).

Total current expenditures for public primary schools.


Expenditure per capita for years specificd.

|  | Year. | Per capita of population. |  | Per capita of enrollment in public primary schools (infant schools included). |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1877 |  | Francs. 2.55 | \$0.51 | Francs. 23.45 | \$1.69 |
| 1881-82 |  | 3.51 | . 70 | 30.25 | 6.05 |
| 1886-87 |  | 4.52 | . 90 | 34.85 | 6.97 |
| 1891-92 |  | 4.82 | . 96 | 39.26 | 7.85 |
| 1896-97 |  | 5.55 | 1.11 | 46.00 | 9.20 |

MOVEMENT FOR PROLONGING THE EDUCATION OF THE PEOPLE.
The obligatory period of primary instruction extends from the sixth to the thirteenth year, but a child who passes the examination for the certificate of primary studies is exempt from the obligation to attend school. Candidates may be admitted to this examination at 11 years of age, and in fact a large proportion of those who seek the certificate do so at that early age. Hence the very means taken to increase the interest of pupils tends to shorten their school term. The majority of the children leave school at an earlier age than 13 , and even for those who pass the whole obligatory period in school the wholesome restraints of instruction and constant supervision are too soon removed. It is also true in France, as in other countries, that elementary instruction, by its natural limitations, does not leave the same lasting effect upon the character or furnish the same intellectual resources as higher education.

The condition of the young people of the laboring classes thrown upon the world with meager attainments and without preparation for any particular industry has long excited the serions attention of the Government and of public-spirited, earnest men and women throughout the country. The recent vigorous movement for extending the provision for adult education is the outcome of this solicitude. The Government has given substantial aid to the cause, and in 1895 ordered a special investigation, with a view to obtaining complete information as to the status of the work and to determining the means for extending and improving it. This commission was intrusted to M. Edouard

Petit, a professor in one of the Paris lycées and an indefatigable promoter of the cause of adult education. He found teachers and professors everywhere alive to the importance of the effort and ready to give their aid in establishing and maintaining classes. Numerous private societies entered into the work with great spirit, and in 1895 the Havre society for "Instruction by Objects" (enseignement par l'aspect) celebrated its firteenth anniversary by calling a congress of all the societies engaged in promoting popular education to consider the subject of the systematic instruction of adults and adolescents. The minister of public instraction presided orer the congress and the resolutions of this body have shaped in a measure the subsequent oficial regulations. These schools and classes, which are held generally in the evening, sometimes on Sunday, ofier courses of instruction for illiterates, review courses and continuation courses. The last named have usually a technical or industrial character and prepare the student, especially in the rural communities, for agriculture and other pursuits. The local adaptation of the courses is carefully studied, and also their relation to the age and economic condition of the students. Civic instruction has a large place in the programmes, and the subject is much more thoroughly treated than is possible in the primary schools. The students in general show deep and earnest appreciation of the opportunities thus afforded. The growth of the work is shown by the following statistics:

|  | Number of courses of lectures. |  |  | Number of attendants reg. istered. | Number of regular attendents. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| xear. | Formen. | For women. | Total. |  | Men. | Women. | Total. |
| 1895-96. | 13,920 | 1,808 | 15, 728 | 400, 000 |  |  | 270, 500 |
| $1896-97$. $1897-98$. | 20,099 22,939 | 4, <br> 7 | 24,528 30,368 | 700,000 850,000 | $\begin{aligned} & 310,926 \\ & 378,196 \end{aligned}$ | $\begin{array}{r} 68,555 \\ 101,711 \end{array}$ | $\begin{aligned} & 409,481 \\ & 482,907 \end{aligned}$ |

The effect of public instruction in diminishing illiteracy is shown by the decreasing ratio of illiterates. The following table shows the number of illiterates in every hundred persons of the classes specified:

|  | Year. | Conscripts. | Newly married- |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Men. | Women. |
| 18701. |  |  | 26.8 | 39.4 |
| $1880^{1}$. |  | 14.4 | 16.1 | 24.5 |
| $1887{ }^{1}$. |  | 10.2 | 10.7 | 17 |
| 18921. |  | 6.9 | 8.1 | 12.2 |
| $1895{ }^{1}$. |  | 5.4 | 6.3 | 9.4 |
| $1896{ }^{1}$ |  | 5.3 |  | 8.8 |
| $1897{ }^{2}$. |  | 5.1 |  |  |

${ }^{1}$ Report of M. Maurice-Faure, 1899, p. 251.
${ }^{2}$ Report of M. Levasseur, 1896-97, pp.clxvi-vii.

## SECONDARY EDUCATION.

The department of secondary education (M. Rabier, director) comprises 109 State classical colleges (lycées) for boys only, established and maintained by the Central Government, and 229 communal colleges, also for boys, established by local authorities, but aided by the State,
and the more recently established lycées and colleges for girls. Besides the public secondary schools there are secondary institutions maintained by religious associations and private secular schools. Secondary schools offer a complete course of education, beginning at an elementary stage and ending with the bachelor's degree. Above them are the highly specialized university courses and the special schools. The following statistics show the relative status of the several classes of secondary schools in 1887 and for the period 1892 to 1899, inclusive :

Enrollment in secondary schools for boys.

| Classes of institutions. | 1887.1 | $1892 .{ }^{2}$ | $1893 .{ }^{2}$ | 1894. ${ }^{2}$ | $1895 .{ }^{2}$ | $1896 .{ }^{2}$ | $1897 .{ }^{2}$ | 1898.3 | 1899. ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State schools: Lycées.. Colleges. | $\begin{array}{r} 53,816 \\ -3 \leftrightarrow, 086 \end{array}$ | $\begin{aligned} & 52,945 \\ & 32,508 \end{aligned}$ | $\begin{aligned} & 53,974 \\ & 32,709 \end{aligned}$ | $\begin{aligned} & 53,490 \\ & 32,421 \end{aligned}$ | $\begin{aligned} & 53,962 \\ & 32,161 \end{aligned}$ | $\begin{aligned} & 53,290 \\ & 32,224 \end{aligned}$ | $\begin{aligned} & 52,427 \\ & 32,412 \end{aligned}$ | $\begin{aligned} & 51,892 \\ & 32,510 \end{aligned}$ | $\begin{gathered} 51,997 \\ 32,784 \end{gathered}$ |
| Total <br> Schools of religious associations: <br> Classical. <br> Petits séminaires | 89,902 | 85, 453 | 86, 683 | 85,911 | 86,123 | 85,514 | 81, 839 | 84, 402 | 84,781 |
|  | 50, 085 | $\begin{aligned} & 51,087 \\ & 23,918 \end{aligned}$ | $\begin{array}{r} 51,377 \\ 23,849 \end{array}$ | $\begin{aligned} & 56,265,265 \\ & 25,354 \end{aligned}$ | $\begin{aligned} & 57,250 \\ & 25,407 \end{aligned}$ | $\begin{aligned} & 58,506 \\ & 21,737 \end{aligned}$ | $\begin{aligned} & 62,188 \\ & 22,381 \end{aligned}$ | $\begin{aligned} & 67,643 \\ & 23,497 \end{aligned}$ |  |
| Total <br> Private secular schools | $\begin{aligned} & 50,085 \\ & 20,174 \end{aligned}$ | $\begin{aligned} & 75,035 \\ & 16,036 \end{aligned}$ | $\begin{aligned} & 75,226 \\ & 14,028 \end{aligned}$ | $\begin{aligned} & 81,619 \\ & 14,214 \end{aligned}$ | $\begin{aligned} & 82,657 \\ & 12,011 \end{aligned}$ | $\begin{aligned} & 80,243 \\ & 13,599 \end{aligned}$ | $\begin{aligned} & 84,569 \\ & 12,813 \end{aligned}$ | $\begin{array}{r} 91,140 \\ 9,725 \end{array}$ |  |
| Total non-State...... <br> Grand total | 70,259 | 91,3:11 | 89,254 | 95,833 | 94, 668 | 93,842 | 97,382 | 100, 865 |  |
|  | 160, 161 | 176, 794 | 175,937 | 181, 744 | 180, 791 | 179,356 | 182, 221 | 185, 267 |  |

${ }^{1}$ From Statistique de l'enseignement secondaire des garcons, 1887, pp.1vi, 1xxviii, xcviii.
${ }^{2}$ Rapports faits au nom de la commission du budget, etc.-Service de l'instruction publique par M. Bouge, 1897, pp. 124, 125 ; also 1898, pp. 32, 33.
${ }^{3}$ The same by M. Maurice-Faure, 1900, pp. 240-243, 248-253.
The classification of students in the lycées and colleges in 1899 was as follows:


Proportion of total students in each division.

|  | Classical course. | Modern course, including special mathematics. | Preparatory course. |
| :---: | :---: | :---: | :---: |
| Lycées Commercial colleges | Per cent. 45 28 | Per cent. $\begin{aligned} & 31 \\ & 44 \end{aligned}$ | Per cent. $\begin{aligned} & 24 \\ & 28 \end{aligned}$ |

From the statistics of enrollment it will be seen that there has been a gradual decline in the attendance upon the State and communal secondary schools during the period reviewed, a marked decline in the attendance upon the private sccular schools, and a steady increase in the attendance upon the clerical schools.

The apparent transier of pupils from State to clerical schools has been a cause of great disturbance to the Govermment and the chief
reason for the appointment of a commission by the Chamber of Deputies to inquire into the subject of secondary education in general, with a view to such action as may strengthen and extend the influence of the public system. The solicitude of the Government in respect to this interest is voiced by M. Maurice-Faure, chairman of the committee on finance of the Chamber of Deputies. In his report accompanying the estimates for the service of public instruction for 1900 the chairman says:

It is impossible to set too high a value upon the rôle of secondary education in our democratic society and its influence upon the future republican government. Doubtless to-day there is no person so humble that he may not aspire to bear a part in the direction of public affairs, and it is an honor to the republic that by means of the general difiusion of gratuitous instruction it has enabled every citizen to cherish the legitimate ambition of serving his country in any post, however elevated, for which his intelligence and character fit him. But it is none the less evident that those who, by reason of extended study, have had their intellectual faculties most completely developed are better prepared than their fellow-citizens less favored in this respect to bear a decisive part in the conduct of the affairs of state and in the destinies of the nation. It is certain that the regular progress of democratic institutions and the peaceful advent of a better social organization are impossible, excepting unler one condition, namely, that those who, by reason of their education, have the most ability and authority to bring to bear upon political and economic progress should be disposed, by their very education, by the habits of thought and the principles which they have acquired, to comprehend the importance of this progress and to promote it with convincing ardor and devotion.

With this conception of secondary education as a means of fortifying the republican government and perfecting the new social order, M. Maurice-Faure contrasts the spirit and tendencies of the schools of the religious orders. These, he asserts, "foster contempt and opposition toward the Govermment, and are a menace to the Republic." That this conviction is widespread in Government circles is indicated by the bill against the religious associations introduced at the opening of the present session of the Chambers. The outcome of this measure in respect to secondary education and of the pending measure for the reform of the State secondary scbools are matters of deep and universal interest. The basis of the project of reform which has been submitted by the minister to the superior council of education is the report of the Ribot commission, whose proceedings were reviewed in the Commissioner's Report for $1898-99 .{ }^{1}$

The measure is intended to secure greater freedom in the conduct of the lycées, larger initiative for the principals, to bring the professors into closer relations with the life of the schools, and to improve the moral and hygienic conditions of the household departments. As regards curriculum, the purpose is evident to free the classical course from an excessive philological tendency and to promote its liberalizing influence and culture aims. The modern course is to be more fully differentiated from the classical and its purposes more exactly defined.

In the language of the minister's circular: "It should correspond to the economic needs of the country, and should furnish not a narrow specialized professional training, but a broad general preparation for agricultural, commercial and industrial, and colonial careers." Science and modern languages are to be the chief studies of the modern course.

The most radical change proposed by the measure is the trifurcated programme for the classical course. Since 1890 the entire classical programme has been obligatory upon all students in the classical section up to the beginning of the last school year. In this last year a choice was allowed between philosophy and science. The new measure provides for a choice between three parallel courses for the last three school years, options being allowed between Greek, science, and modern languages. In the high recognition thus accorded modern languages the project marks a wide departure from all previous propositions for the reorganization of liberal education.

## STATE PROVISION OF SECONDARY SCHOOLS FOR GIRLS.

The law creating lycées for women was passed in 1880, the year after the law establishing normal schools for women upon the same basis as those for men. The normal schools had, indeed, in a certain sense, prepared the way for the more important measure of 1880, which was intended to reach the superior classes.

The advocates of this measure had no thought, however, of duplicating for women the training which tradition and custom sanctioned for men. They purposely elaborated a distinctive programme for the new institutions, from which Latin and Greek are omitted, mathematics appears in a limited form, and philosophy is represented by elementary notions of ethics. The distinctive studies of the secondary curriculum for boys are replaced in the lycées for girls by modern languages and literature, which are taught in a serious and critical manner. Large place is given also to history, particularly to the history of civilization, to art studies, and to domestic and hygienic science.

The year after the passage of the law creating the lycées for girls the Government established a normal school to prepare professors for the new institutions. Situated at Sèvres, within easy access of the city, the school may be regarded, by reason both of the severity of its studies and the quality of its professors, as an annex of the Paris University. In the roll of its teaching personnel are found the names of Darmesteter for letters, Joly and Marion for psychology, Poincaré for physics. The entire teaching corps, men and women, the latter forming a small minority, are university graduates, which term implies a diploma above the bachelor's degree. As in all French boarding schools, there is complete separation of the scholastic and domestic departments, save that both are under one direction. The present head of the institution is Mme. Marion, widow of the distinguished author and professor, M. Henri Marion.

The growth of the lycées and colleges for young women since their foundation in 1850 is shown by the following statistics:

Enrollment in lycées and colleges for young women from 1881 to 1899. ${ }^{1}$

| Year. | Lreées. |  |  | Colleges. |  |  | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Academic department. | Primary department. | Total. | Academic department. | Primary department. | Total. |  |
| 1881. |  |  | 71 |  |  | 229 | 300 |
| 1882. | 315 | 206 | 521 | 429 | 567 | 996 | 1,517 |
| 1883. | 817 | 464 | 1,281 | 787 | 869 | 1,656 | 2,937 |
| 1esi. | 1,080 | 618 | 1,698 | 1,060 | 988 | 2,048 | 3,746 |
| 1885. | 1,421 | 522 | 2, 243 | 1,122 | 1,012 | 2,134 | 4.377 |
| 1886 | 1,713 | 1,048 | 2,761 | 1,218 | ,958 | 2, 206 | 4,967 |
| 1887. | 1,953 | 1,295 | 3,248 | 1,416 | 1,152 | 2,508 | 5,846 |
| 1888. | 2,191 | 1,481 | 3, 672 | 1,596 | 1,366 | 2,962 | 6,634 |
| 1889. | 2,291 | 1,570 | 3,864 | 1,571 | 1,416 | 2,087 | 6,851 |
| 1890. | 2,326 | 1,120 | 3,955 | 1,604 | 1,484 | 3,088 | 7,043 |
| 1891. | 2, 831 | 2,132 | 4,963 | 1,410 | - 1,272 | 2,682 | 7,645 |
| 1892. | 3, 211 | 2, 411 | 5, 225 | 1,460 | 1,416 | 2,876 | 8,501 |
| 1893. | 3, 704 | 2,822 | 6,526 | 1,365 | 1,358 | 2,723 | 9,249 |
| 1894. | 3,921 | 2, 899 | 6,823 | 1, 602 | 1,515 | 3,117 | 9,840 |
| 1895. | 4,055 | 3,108 | 7,163 | 1,702 | 1,548 | 3, 250 | 10, 413 |
| 1896 | 4,206 | 3,297 | 7,563 | 1,653 | 1,429 | 3,082 | 10,645 |
| 1897 | 4,352 | 3, 410 | 7,792 | 1,648 | 1,403 | 3, 051 | 10,813 |
| 1898 | 4,378 | 3, 623 | 8,001 | 1,882 | 1,519 | 3, 401 | 11,402 |
| 1899. | 4,675 | 3,756 | 8,431 | 1,030 | 1,633 | 3,563 | 11,994 |
| Increase 1882-1899 | 4,360 | 3, 550 | 7,910 | 1,501 | 1,066 | 2,567 | 10, 477 |

${ }^{1}$ From Lycées and Colleges for Young Women, by M. Camille see (author of the law of 1880), edition for the Exposition of 1900 .

The teaching staff of the lycées and colleges in 1899 comprised 687 professors and assistants. The financial review presented by M. Camille Sée, in his history of the measure providing higher education for women, shows that the State adranced the sum of $33,409,437$ francs $(\$ 6,681,887)$ from 1891 to 1898 for building purposes. These advances are to be met by the cities and towns in which the lycees are situated.

The total receipts of the lycees and colleges, exclusive of the boarding departments, amounted in 1898 to $3,76 \pm, 35 \pm$ francs, of which the State furnished 70 per cent, tuition fees 27 per cent, and local authorities the balance.

## UNIVERSITIES.

The department of higher instruction (director, M. Liard) includes the State universities and the special schools which are subject to the control of the minister of public instruction.

Under the university system created by Napoleon in 1808 the old universities of France were deprived of their autonomy and became simple groups of faculties-law, medicine, theology, letters, and sciences-located at the principal towns of the academies. Their chief function was that of conferring degrees, the work of higher education having been relegated to the classical colleges (lycées) and the special schools. Thus the faculties were severed from the intellectual life and activity of the country. Paris alone formed an exception, since here the faculty groups comprised always eminent men who maintained the spirit and prestige of the great university.
In the period from the fall of Napoleon (1815) to the establishment
of the Republic (1870) various projects relative to higher education were entertained, but no radical changes were effected. As regards organization and functions the State faculties were essentially, in 1870, what they were under the first Empire.

The Republic began the work of freeing higher education from the incubus of officialism by the law of July 12,1875 , which accorded the right of teaching to any person who should conform to certain prescribed conditions. One article of the same law provided that at the expiration of a year the Government should present a bill having for its object the reform of higher education. The need of this reform was specially urged in a speech by M. Paul Bert, setting forth in vivid terms the low state into which university education had fallen. Eren with respect to the Paris faculties he quoted the words of Claude Bernard, "The laboratories of Paris are the tombs of savants."

The progress of legislation was slow, but the purpose of the Goyernment was attested by increased appropriations, the enrichment of programmes, and the creation of new chairs. Between 1870 and 1878 the State appropriations for the faculties rose from $\$ 1,152,773$ to $\$ 1,939,773$; from 1878 to 1888 they were doubled. In 1889 they had risen to $\$ 2,797,071$; in 1892 the State appropriated for the universities $\$ 2,332,000$.

A decree of July 25, 1885, authorized the faculties to hold property, to receive gifts, and to manage their own estates, and creatod a general council of each group of faculties as its legal representative. A second decree of the same year, December 28,1885 , extended the authority of this general council to all matters pertaining to the internal affairs of the group, and created also a council of each faculty to administer its separate affairs.

The work of reorganization was completed by the law of duly 10 , 1896, which restored the old title of university, and provided for the transformation of the faculty groups into autonomous institutions. Under this law 15 universities have been constituted.

While the measures here noted were in progress the work of providing suitable housing and adequate equipment for the universities was also pushed with vigor. Buildings have been erected on which the State and the communes or towns have expended more than $100,000,000$ francs. The total reported in 1887 amounted to $\$ 22,195,000$, of which the cities bore $\$ 9,650,000$. Libraries have been enlarged and fine laboratories constructed, especially at Paris, Lyon, Lille, and Nancy. The number of university chairs has been greatly increased; thus the Paris faculty of letters, which in 1870 had only 11 chairs, has now 27 , besides 7 complementary courses and 10 lectureships.

In the provincial universities the development of courses of local interest is noticeable; such are the courses in the history of Provence and of the Provençal language and literature at Aix-Marseille and of Norman art, literature, customs, and dialect at Caen.

The prestige of the universities has been also increased by the decree of July 9, 1897, empowering them to establish a special doctorate.

This degree, which does not, like the State degrees, carry professional privileges and right, is open to both natives and foreigners. It is not limited, as is the State doctorate, to candidates who have obtained the French diplomas of bachelor and licentiate (licencié about equivalent to the English A. M.), nor is it required that the candidate should have effected the whole of his studies in France.

The university doctorate becomes, therefore, an incentive to French students who wish to pursue specialties without regard to strictly professional careers, and at the same time it ofiers to foreign students a valuable diploma upon favorable conditions. Although the benefits of the degree are not confined to foreigners, it may properly be included in the series of measures by which the Government has sought to attract the attention of foreign students to the provision for special study and research which is offered by its universities and special schools.

Under the liberal terms of the law of 1875, private faculties-that is, under private control or free from State control-have flourished, and the creation of special schools free also from State control, such as the École Libre des Sciences Politiques, has also been encouraged.

The following statistics show the status of the universities and former faculties at the dates specified:

Statistics of Siate faculties and universities.

| Academic districts. | Faculties, 1878-88. |  |  | Universities. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1897-98. |  | 1898-99. |
|  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { students. } \end{aligned}$ | $\begin{gathered} \text { Income } \\ \text { of } \\ \text { faculties. } \end{gathered}$ | Current expenditures. | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { students. }{ }^{2} \end{gathered}$ | $\underset{\text { ture. }{ }^{3}}{\substack{\text { Expendi- }}}$ | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { students. } \end{aligned}$ |
| Paris. | 9,140 | \$685, 316 | \$663, 843 | 12,047 | \$1, 001, 162 | 11,829 |
| Aix | 433 | 95, 546 | 99, 604 | 849 | 92, 266 | 845 |
| Besancon | 130 | 43,797 | 33, 754 | 197 | 42,698 | 220 |
| Bordeaux | 1,029 | 142, 064 | 144,206 | 2,144 | 225,656 | 1,961 |
| Caen | 531 | 101, 841 | 71,411 | 598 | S0, 407 | 572 |
| Chambéry |  | 2, 600 | 1,290 |  |  |  |
| Clermont | 96 | 45,492 | 35, 259 | 257 | 40,286 | 256 |
| Dijon | 236 | 69, 884 | 58,519 | 604 | 80,933 | 642 |
| Grenobl | 318 | 65, 035 | 54, 011 | 476 | 77,826 | 523 |
| Lille | 810 | 138,357 | 128,277 | 1,354 | 187, 202 | 1,158 |
| Lyon. | 962 | 175, 640 | 185, 537 | 2,335 | 262, 120 | 2, 405 |
| Montpellie | 890 | 156, 110 | 154, 177 | 1,496 | 196,941 | 1,446 |
| Nancy | 454 | 158, 255 | 159,930 | 1,001 | 203, 375 | 952 |
| Poitiers | 391 | 82, 290 | 58,112 | 764 | 71,172 | 736 |
| Rennes. | 659 | 114,345 | 61, 484 | 1,063 | 82, 022 | 1,057 |
| Toulouse | 1,303 | 121, 014 | 92, 110 | 1,885 | 127, 934 | 1, 897 |
| Schools of medicine and pharmacy not included in the universities ............. | 223 | 98, 623 | 87,435 | ${ }^{4} 763$ |  | 786 |
|  |  |  |  | 949 |  | 969 |
| Total | 17,605 | 2, 250, 209 | 2, 088, 959 | 28,782 | 2, 772, 001 | 28, 254 |

[^94]Distribution of students by fuculties.

${ }^{1}$ Statistique de l'enseignement supérieur, 1888.
${ }^{2}$ Enquêtes et Documents relatifs à l'enseignement supérieur.
${ }^{3}$ Report of M. Maurice-Faure, 1900, p. 35.
${ }^{4}$ Of this total 871 were women and 1,784 were foreigners.
${ }^{5}$ Of this total 817 were women and 1,635 were foreigners.

## THE CONGRESS ON PRIMARY EDUCATION.

The Paris Exposition of 1900 will be especially memorable for the great number of congresses that were held in connection with it and the vast range of interests which they comprised. No less than 11 congresses were distinctly educational, and several others were closely related to the subject. The following report of the congress on primary education is cited from the report of the Commissioner-general of the United States for the Paris Exposition:

Report of the Congress on Primary Education, Paris Exposition, 1900.
Hon. Ferdinand W. Peck,
Commissioner-General for the United States to the Paris Exposition, 1900.
Sir: The congress of primary education in connection with the Paris Exposition, to which I had the honor of being appointed a delegate from the United States, was held in the Sorbonne, August 2 to 5 . Although the congress was organized in sections and overlapped in time the sessions of the congresses of secondary and of superior education, there was no confusion or crowding. The section meetings were assigned to class rooms; office and waiting rooms were conveniently at hand and plainly indicated, and the amphitheater, with its noble statues and beautioul mural painting, afforded an ideal place for the general sessions.
In its organization the congress marked an advance over previous congresses of the same class in France. It was not ordered by the administration, but started by schoolmen acting in the spirit of professional freedom and of international sympathy. The programme was announced several months beforehand and papers on the general topics solicited from different countries. As the event proved, the formal papers and the discussions related almost exclusively to French conditions; but this fact should not be allowed to obscure the spirit in which the work had been developed under the auspices of the general secretary, M. Jost, one of the most distinguished and genial schoolmen of France. At the opening session the eminent rector of the Academy of Paris, M. Gréard, was unanimously chosen president. The assembly on this occasion was large, comprising about 1,500 French teachers and officers of education and 200 foreign delegates. On the plafform with M. Greard were the delegates of the ministry of public instruction; M. Bayet, chief of the department of

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primary instruction, and MI. Jacoulet, honorary inspector-general, distinguished delegates from foreign governments, and the official committee of the congress.

In his inaugural address M. Greard struck the keynote of the social transformation which the Republic has silently accomplished in France through the elevation of primary education. He recalled that in 1869, before a commission on higher education, M. Guizot, author of the primary-school law of 1833, regretted that primary instruction was not represented on the commission. "This reproach," said M. Gréard, "is no longer possible. Primary education has its place in the great councils to-day. In these it treats its own affairs with competence and discusses general interests with lucidity and wisdom." As the most important aim of the future, M. Greard signified the enrichment of primary instruction, and this not by overloading the programmes, but by elevating the spirit and improving the methods of instruction, and further by prolonging the period of school attendance or of formal instruction. This, in his opinion, would be accomplished by a judicious balancing of general instruction with technical training in the public high schools, and by the liberal provision of auxiliary agencies, as evening schools, popular lectures, etc., for adults whose school training has been limited. M. Gréard touched upon the principal points in the questions to be considered in the congress and expressed the hope that the conclusions that might be reached would excite interest in all countries and be fruitful in new views and in modifications of existing conditions.

For practical work the congress was organized in five sections, according to the number of subjects proposed for consideration." The "memoirs" that had been received by the respective sections during the months of preparation had been confided in each case to two secretaries, one of whom analyzed the contents of the papers and the other summed up the positions taken by the authors. In this way each question was developed in all its aspects before the section meetings and free discussion invited. Thus, while the programme was strictly followed, there was full opportunity for all members to secure a hearing.

The question of making instruction in domestic arts a feature of all primary schools, including even infant schools, was treated in the first section. Mlle. Brès, general inspectress of infant schools (écoles maternelles), who had analyzed the memoirs for this section, created a sensation by insisting that the instruction should be given alike to boys and girls. She maintained the position so effectively against lively opposition that it was embodied in the final resolutions. During the discussion M. Bergman, inspector-general of public schools in Stockholm, explained that this course is pursued in that city, where boys and girls go to the same school until 10 years of age, and have the same exercises in knitting, sewing, and the repairing of garments. Mr. Lyulph Stanley, of the London school board, gave an interesting account of the cooking classes connected with the board schools, in which 44,000 girls are taught to prepare food properly, and the laundry classes, in which 24,000 girls learn to wash and iron.

The conclusion was recorded by the congress that domestic training should be given in all classes of primary schools, with certain modifications in the schools for boys, and that it should be intrusted to women teachers, who must give proof of special competency for the work.

To the second section of the congress had been intrusted the most important of all the questions considered, namely, that of "regularity in school attendance." The discussions exposed a condition upon which French statistics usually throw no light.

[^95]It has long been evident from the official reports that practically all the children of school age are enrolled in school or instructed in some measure; but as the average attendance is never given, it is impossible even to guess what amount of schooling this fact implies. From statements made in the congress, and the agreement as to the necessity of reform in this particular, two things were evident: First, that the compulsory law is poorly enforced in many communes; second, that the attendance committees (commissions scolaires) are of little account. In the absence of statistic 3 there was no real measure of the irregular or nonattendance, but its reality was admitted and the force of the discussion was expended on the means of correcting the evil. The opinion was expressed that the compulsory law should itself be strengthened; but this point was not embodied in a resolution. The main resolutions carried were: That the communal funds in aid of poor children should be continued; further considering that under a democratic government the efforts of all patriotic spirits should be united in the interests of the schools, the congress esteemed it desirable that a school council of representative men, the fathers of families, shou'd be formed in each commune to look particularly after the children of school age and to promote their material and moral welfare.

The sessions of the third section were occupied with interesting discussions of the question of moral instruction, its nature, the principles upon which it should be based, and the method of instruction appropriate to the subject. The conclusions were reached that moral instruction should occupy the first place in the primary school; that it should be based upon reason, or the law of mutual respect, and that it should be independent of, but not hostile to, religious instruction.

The fourth section was occupied with the question of the higher primary schools, a grade below our high schools and having large development on the side of industrial art. The discussions turned particularly upon the scope and gradations of industrial as distinguished from general education, and the means of breaking down the social distinctions that separate the system of primary education in France from the classical schools without destroying the practical character of the former. This second consideration was recognized as one of profound significance for the country, but no satisfactory solution was offered. The current of feeling on the subject was evident from the interest shown in a brief paper presented in this section by the delegate from the United States. The paper treated of the distinction between the American high school and the French higher primary school. The statement that the people of the United States oppose distinctions in the public-school system which imply absolute or permanent social distinctions among the people was particularly applauded.

In his address before the opening session of the congress M. Gréard had expressed the opinion that these distinctions are diminishing in France. He attributed the change to the growing appreciation in the higher educational circles of the sound principles and the effective methods applied in the primary system. The section, ratifying the resolutions which summed up the prevailing views of the congress, expressed the opinion that the higher primary schools should be carefully distinguished on the one side from the schools of practical industry-that is, art or trade schools-and on the other from the classical secondary schools.

The fifth section of the congress considered the question of auxiliary or "postschool" agencies for continuing the formal education of the adult masses. This is a work upon which France has entered with immense spirit during the present decade, and which has been maintained and developed with persistence and ardor. From the nature of the subject the discussions in this section were more vague and diffuse than in the other sections, where all the proceedings centered in definite propositions. The subject, however, proved to be one of general interest, as was shown by the number of communications from foreign countries. These, as summarized by M. Edouard Petit, afforded a comprehensive review of what may be regarded as a great social
movement affecting the principal countries of the world. The movement has assumed different aspects in different countries, and there were included in the survey agencies as varied as the university extension of England and the secular Sunday schools of Russia; but it was made evident that all were animated by the same purpose, namely, the elevation and practical advantage of the laboring classes. France has contributed to the movement two original experiments that greatly interested the foreign delegates to the congress. One of these is the institution of mutual aid societies among pupils; the other, associations of former pupils pledged to continue their interest in their old school, to foster the intellectual development and social pleasure of their members, and to promote a lively interest in all efforts for improving the condition of the working classes.

The importance of this subject was emphasized by its revival in the full session of the congress, where it divided attention with the question of the higher primary schools. The resolutions of the section affirming the necessity of the post-school agencies and the importance of all the lines along which these are operating were confirmed in the full session.

Since the subject is agitated in all countries, it was recognized that an international bureau or society for the exchange of information would find in relation to this movement its special mission. The proposition to form such a society, which originated at the banquet of the jury on primary education, was accordingly brought up and confirmed in the congress. It was resolved to make the committee of the congress the official bureau of the society. M. Bourgeois graciously accepted the presidency of the society, which thus, to quote M. Bayet, has its future assured as a living and permanent institution.

The closing public session of the congress was honored by the presence of the minister of public instruction, M. Leygues, who in a brief address emphasized the important relation between public education and the safety of a people. He saw in the congress the augury of a better social era which will insure to France "more of prosperity, justice, and liberty, and develop between all nations a higher degree of union and solidarity."

The final ceremony of the congress was a grand banquet in the restaurant of the nations in the "Yieux Paris." Above six hundred members participated, and in the absence of the minister of public instruction, occasioned by the sudden death of the King of Italy, M. Bayet, chief of the primary department, presided. In the toasts, which occupied an hour and a half, two remote colonies of France, Tunis and Guadaloupe, and eleven foreign countries were represented by their delegates. The banquet terminated to the stirring strains of the Marseillaise. To the foreigners who were invited guests its memories remain as a perpetual sign of the unbounded hospitality and social charm of their colleagues of France.

Anva Tolman Smith,
Member of the International Jury, Class 1, Group 1, Delegate from the United States to the Congress on Primary Education.

## CHAPTER XXXII.

## REPORT ON EDUCATION IN ALASKA.

Departament of the Interior, Bureau of Education, Alaska Division, Washington, D. C., June 30, 1900.

Sir: I have the honor to submit the fifteenth annual report of the Alaska division, for the fiscal year ending June 30, 1900.

During the year there have been maintained in Alaska 25 public schools under the immediate supervision of this Bureau, with 27 teachers and an enrollment of 1,753 pupils. In addition to supporting the above public schools, this Office continues to pay the salaries of 5 teachers in the Sitka industrial school, giving instruction in the branches of carpentering, domestic science, painting, tinsmithing, net making, boat building, and in the common English branches, the total number of pupils under instruction being 151.

On account of the very large accession to the population of Cape Nome region, by reason of immigration of miners with their families, it has been found important to create the position of superintendent of schools for the Cape Nome district. To this position a citizen of Nome has been appointed. His duties are precisely similar to those of the superintendent of schools in the Sitka district-namely, to visit the schools which from time to time may be established within his district, report on their condition, examine candidates for the position of teacher, and aid this Bureau with suggestions and advice regarding the educational affairs of northwestern Alaska.

Owing to the friendly cooperation of the priests of the Russo-Greek churches throughout southwestern Alaska in urging the children of their parishioners to attend the public schools, the seating capacity of the school buildings in that region has been severely taxed. It has been necessary to enlarge the school building at Kadiak and to send additional teachers to that place and to Unalaska.

In several sections of Alaska the inffux of white men has resulted in an increased interest in schools on the part of the adult native Alaskans. Realizing the advantages to be obtained by such a knowledge of the English language as will enable them to trade intelligently with the white men, they have made requests for night schools. At Wood Island it has been possible to comply with such a request, and the result has been very satisfactory. At Gravina, Saxman, and Wrangell native Alaskans are efficient members of the local school committees which aid this Bureau in the management of the schools.

The following reports indicate the character and scope of the Alaskan public schools:

Sitka, No. 1.-Miss Cassia Patton, teacher; enrollment, 47; population, white. Miss Patton reports:

The condition of Sitka School No. 1 during the last year has been quite satisfactory.
The weather during the short days having been very pleasant, there was very little sickness among the children. The only drawback to regular attendance is the observance of holy days, in which some are improving by attending service in the morning and coming to school instead of playing, as formerly, in the afternoon.

During the Russian lenten season the priest very sensibly suggested to the children to fast during the first week, and I encouraged them to follow that plan, hoping that all would then be in school again until Easter week, and it was better.

An offer from Mrs. Brady and Mrs. Mills, who had been teachers, to assist me in taking charge of the music and drawing was gladly accepted.

Later, Miss Constance Stowell, who is fitting herself for a teacher and desired practice, gave us her mornings.

With so many kind friends I was able to do much more for my pupils individually, which is a great gain, and came nearer the ideal toward which I aim.

In October we celebrated "transfer day" by having an industrial fair, the first, I believe, in Alaska. Before the close of school in June I laid the plans before the children, and they, at home during vacation, took up the industries, and the result was a fine display of potatoes, carrots, turnips, lettuce, flowers, salt fish, jelly, bread, cake, aprons, pillowcases, lace, sailboats, and kites.
This is a step toward that industrial education which, with my numerous classes in the three R's, I have not yet been able to introduce, but which will make the coming Alaskan better suited to his environment-not only a consumer but a producer.

I believe that the county fair has been of much use in interesting people in products of the home and farm, and I hope that this may open up something of the kind in Alaska.

To foster the love of the beautiful with the useful, I gave for the fair prizes those blessings, "the Perry pictures."

At Christmas time we gave an operetta, in which all the children took part and scored a great success.

I hope that I will be able to report as well of the work of the next year, which is soon to begin.

Juneav, No. 1.-C. C. Solter and Miss Jennie Larsen, teachers; enrollment, 96; population, white. The following is Mr. Solter's report:

The people of Juneau have shown their appreciation of the increased facilities of the school by a corresponding increase of patronage. As soon as it was known that two teachers would be employed many parents determined to send their children to us, although they had already made arrangements to send them elsewhere. After our school was fairly started still more joined our ranks, a number of whom had already taken up their studies in the private schools of the town.

Sickness for a time seriously interfered with the attendance. A number of children were ill with typhoid, la grippe, or severe colds. A few were also troubled with their eyesight.

On the whole, fair progress has been made. Some pupils have excelled in arithmetic, others in history, while a number have done good work in all branches.

Other schools in our town are the Catholic, where four teachers are employed; another private school with one teacher, and one school under the auspices of the Greco-Russian Church. In the latter the attendance is small. The private school has closed, in all probability permanently. The Catholics, however, are building a large schoolhouse or college to accommodate the expected increase of their pupils. A number of children have gone to the States to attend high schools or colleges.

The people of Juneau have for some time been desirous of a graded and high school, and now since they are taxed it can not be denied that they deserve better school accommodations than they now possess.

My assistant, Miss Larsen, has been faithful to her duties and has done good work in her room. She has the good will of her pupils, and, as far as I know, has given satisfaction. Her pupils have made commendable progress, especially in arithmetic. She teaches many motion songs and recitations, in which her pupils take great delight.

Douglas, No. 1.-Miss Gertrude H. Spiers and Miss Kate Spiers, teachers; enrollment, 100; population, white.
This school began its sessions last August with two teachers. The primary department comprises grades 1,2 , and 3 . The advanced room grades, 4,5 , and 6 . The schools have been quite thoroughly graded, and a suggestive course of study has been adopted.

Perhaps the most notable feature of the work is the regular attendance of such pupils as reside here permanently. About 20 per cent of these have not missed a day during this year. One pupil, Claire Jones, has been present every day for the past three years.
The school year is divided into two terms. The first begins August 1 and closes December 15. The second begins February 15 and closes June 30. In this way much
of the inconvenience resulting from the darkness and storms of the winter months is avoided.

An annual entertainment is given for the benefit of the library fund. About sixty new books will be added this year.

The work in German has been continued, but no new class has been organized. The pupils who began the study two years ago now read easy prose at sight, and write and spell readily. No special attention is given to constructions or declensions.

The school is well supplied with text and literary books, maps, charts, and the usual equipments of a modern school. We have, however, to report that there is urgent need of a new building with suitable well-drained play grounds.

Douglas, No. 2.-Miss Mollie MacAvoy, teacher; enrollment, 37 ; population, white. Miss MacAvoy reports:

It seems to me but yesterday, and yet it has been almost a school year since I landed at Douglas Island.

I found here very intelligent, enterprising, wide-awake people, interested enough in education to keep their children in school regularly, thus giving the teacher much encouragement besides assisting her in many other directions.

The pupils are eager to learn, interested in all their studies, and well behaved, and we have spent a very pleasant as well as profitable winter.

I teach reading, writing, spelling, geography, arithmetic, physiology, morals, marners, drawing, history, language, grammar, gymnastics, and kindergarten.

We have a good literary society, which meets every Friday afternoon.
We had a Christmas entertainment, which was greatly enjoyed, and we are preparing another for the close of the term.

We have commodious quarters and are very comfortable. If the day be unusually gloomy-and we have many dark days in Alaska-and we feel ourselves inclining the least bit toward the blue weather, we have a lively march, a good motion song, a gymnastic exercise, or a ten minutes' reading from an interesting book, and the gloom is quickly dispersed.

We need a playground. We haven't room to play ball, or, in fact, any game except duck-on-the-rock. The girls jump the rope. They used a long seaweed for a rope one day.

The children accidentally broke three small panes of glass, which they replaced. I teach them to take care of the building, books, and, in fact, everything which is left in our care.

We have a nice large flag, which we all love. It floats over us on bright days, and we display it inside the schoolroom on rainy days.

We should like very much to have all the best magazines and more books in our library.

I would like to have a sewing and cooking afternoon each week next year.
I regret to report a tendency on the part of the pupils to stop school at the age of 14. This has been my only discouragement.

I miss a city superintendent and the teachers' meetings, which are so helpful in the States. I love my pupils and my work, and I hope all my coworkers have had as pleasant a year as my first year at Douglas No. 2.

Skagway.-O. B. Gwin, Miss Anna Clayson, Miss Thereca E. Webster, Mrs, Murray B. Miles, teachers; enrollment, 214; population, white.

The following is the report of Mr. Gwin, the principal of the school:
School opened September, in two rooms, with 120 pupils enrolled the first day. Seeing the necessity of immediate action, the local committee immediately secured another room near the school and employed another teacher. Later, owing to the continued growth, a fourth teacher was employed, and the third and fourth teachers were installed in rooms two and one-half blocks from the permanent school building.

At the beginning of school we found that the grades were very badly mixed, there being pupils of all grades and all intermediate points between grades. This was largely owing to the fact that many of the pupils had been out of school a year or more, and because they represented so many schools and systems of grading.

Our work the past year has been largely along lines tending to segregate the classes, and so enable us to make satisfactory classifications for the coming year.

At the beginning of the term we were at a great disadvantage, owing to a shortage of books, lack of proper desks and apparatus, and cramped quarters. Now we have good desks and a fair supply of books, though there is room for improvement along some lines even yet.

It is a very great disadvantage having our school in three buildings. It is hoped that we will have the schools under one roof next year.

We also suffer from a lack of sufficient room for playgrounds. At present the school is located on a lot 50 by 100 feet, of which the building occupies a great part, leaving but little room for playing. Hence the pupils must use the streets and alleys. This is not at all advisable, as the school is located in the business part of town.

The shifting character of the population has had a tendency to injure our schools in the past, but I think we shall suffer less from that cause in the future.
Our isolation from other schools has made it hard to keep up that professional enthusiasm which marks the successful teacher who constantly comes in contact with other teachers of his own and other grades.

While realizing that the Department has but a limited amount of funds at its disposal, we feel it a fact to be deplored that a school system such as might be built up here should be hampered by a lack of funds.
For a few weeks in winter the days are so short that it is impossible to teach the full day, as required by law. On many mornings it was not sufficiently light to begin work till 10.30, and it grew dark again by 2.30 .
The interest and enthusiasm of our local committee can not be too highly praised. The success of our schools the past year has been largely due to their untiring efforts. They have spared no time or pains to give the town the best possible school system.

While some parents are somewhat indifferent to the best interests of their children, the greater number have taken a laudable interest in the welfare of the schools. As a proof of the interest taken by the parents and business men, I may say that at an entertainment given in April over 600 were present, and more than 100 were turned a way owing to a lack of standing room.

We wish to extend to the Bureau of Education the expression of our appreciation of its support as soon as our needs were properly presented to it and it was able to respond.

Fort Wrangell, No. 1.-Miss Nellie Green, teacher; enrollment, 114; population, whites and natives. Miss Green writes:
The native children, if sent to school regularly, learn slowly but surely. Their faith in the white man is great, and for that reason it is easy to work among them. Irregular attendance and tardiness are due to home surroundings. The parents often are indifferent as to whether the children attend or not, and the children use their own time and pleasure in reaching the school. The home lacks system. The natives do not have "a place for everything and everything in its place." Children are often tardy because an article of clothing is lost. Little Patsy has the faculty of losing everything. One day he came to school without his hat; he had lost it. Another time he had to stay at home, for he couldn't find his coat. Even at school I'd ask him to spell a word; he would say, "I can't; I lost it."

It is interesting to visit some of the homes where the members are busy at work. One such home is little Andrew's. The men are busy making snowshoes, the women, baskets. In other homes during the winter the families are gathered around a stove or a smoky open fire, their cooking utensils and remnants of a recent meal forming a not very pleasing picture. The most interesting families are those who retain the simple manners of Indian life, or else those who can successfully imitate the white man's ways. As I was walking one afternoon in early winter in the Thlingket part of town, I came to some Indian women who were sitting on the beach around a fire made from a log of driftwood. Surely these are Nature's children, thought I; nothing could be simpler than their way of living; a warm fire, plenty of pure, fresh air, some dried fish-that was all they needed. I could not understand what they were saying, for they were talking in their native tongue, but I felt sure they had no social problems to vex themselves with.
In a Hydah home I found the members more like white people. The room was arranged with the care of a white person. The Indian woman was preparing the evening meal, which consisted of meat, fried potatoes, and white bread. A lamp was burning on the table; a cat was in front of the stove. Only the dusky faces around me showed that I was in an Indian's home.

I send a photograph of the native school at this place, taken in the month of May. The three little girls in front are white children who have been in school during the year. Their kindness has done much to make the native children less conscious of social difference.

Fort Wrangell, No. 2.-C. C. Cunningham, teacher; enrollment, 114; population, white. Mr. Cunningham writes:

This school was started by the citizens of Fort Wrangel, without aid from the Government, September, 1899. The first move in this direction was made late in the
summer of 1899; my services were not secured till the 17th of September, when I started from Seattle for this place.
On my arrival I found that there were no books in town. Notwithstanding this, however, I examined each pupil on the 22d, and on the 25 th of September began the work of the school. Each pupil ordered his books at once. The merchant to whom these orders were given sent off promptly for them, but for two months I had to hold the school together without books. In the meanwhile there was considerable criticism freely indulged in by several citizens of more or less prominence locally about me because of my failure to procure suitable books. On the 5th of December the books, which had been missent, finally came. Not only was I handicapped on account of a lack of suitable books, but I was also totally without school furniture or supplies, except a few yards of blackboard and some chalk which I brought with me. The carpenters here made me desks after my own plan, which were virtually single desks. I also used several desks which belonged to a private school that formerly existed here. But the schoolroom was not at all suited to the work, its main defects being lack of space for blackboards and difficulty in securing heat and ventilation.

At the beginning I found that the children had been accustomed to do pretty much as they pleased in school. I insisted on rigid order and had it. The children, too, were very backward for their age. The greater number had not attended school for years, or, if they had, had gone only when they felt inclined so to do. They were entirely without training in politeness.

In order to get the children grounded in proper methods of work, an evening study hour was begun and was kept up as long as practicable. I found all the pupils diligent in school, but not very attentive. Outside of school the majority studied but little. They have improved very much in attention and seem more eager to learn than they dici at first.

The support of the school was generous on the part of the people, and the teacher has been well sustained and supported by the parents.
Since the first of March, when the Bureau of Education assumed the salary of the teacher, the school has run along smoothly, and the progress made by the pupils has been good.

The relations between pupils and teacher and between parents and teacher have been very cordial and pleasant. There has been no trouble of a serious nature, and the parents have always been glad, when the teacher required it, to send their children back for work or punishment on Saturday.

Considering the lack of facilities and apparatus at the start, the children of this school have done well.

Haines.-Miss May Mackintosh, teacher; enrollment, 61 ; population, white and Thlingket. Miss Mackintosh writes:

You will notice that, although I have a large enrollment, my average attendance is small. The reason for this lies in the fact that the natives are compelled to seek work at other villages and towns besides this. Also, from the middle of September, 1899, until the middle of October they were nearly all attending various potlatches at Y'Indovtuckyea and Kluckwan. From that time until the middle of November I had a very good attendance; but then they went to Dyea and Skagway, more to the latter place, where they could obtain work, and there more than half of them remained all the winter, when they returned in time to go to halibut fishing. Meanwhile I had at my school nearly every child that remained here. I took the pains to go every day to the village, and if one was absent in the morning, go at noon to discover, if I could, the cause, and remove it if possible or overcome it in some way.

When all the natives were here all the children attended school. But it is discouraging to have them in school for a week or a few weeks, then not see them again perhaps for a month or two; while they have been away they have forgotten almost all they had learned.
Hoonaf.-Mrs. J. W. McFarland, teacher; enrollment, 125; population, Thlingket. Mrs. McFarland writes:

I fear the keynote of my report this year will be one of discouragement. I returned the last of August, after a restful vacation, with renewed energy for another year's work. But before it was time to ring the school bell the first Monday in September the village was deserted. A grand feast and potlatch was to be given at Dundas Bay. This occupied them a week. Then their favorite berry-nagoon-must be gathered and preserved in seal oil for winter use. By the 18th of the month I opened school with 5 scholars, but in a few days I had 35 on the roll. The 1st of December we were getting down to pretty thorough work, when the feasting and
dancing began, with many visitors present from other tribes, and for three months our people were engaged in this dissipation. You can imagine what a demoralizing influence it had upon the school. Rev. Mr. Carle, our minister here, remarked one day that they really attended much better than white children would under similar circumstances, which gave me some encouragement. One day he saw boys sailing their little toy boats; he used all his persuasive powers to get them into school, but they replied, "They went to school all the time." He took a snap shot of the crowd, and you may see a picture soon of how the Hoonah boys attend school. The boys always carry home the bowls of food after the feasts, and they put in the time in this way until this interesting part of the programme comes off. All feasts are ushered in with smoking, and the boys light and carry round the pipes to the guests, enjoying a puff as well as the old folks. But I must say to the credit of the little girls, they did attend school very well, coming thinly clad, many of them in their bare feet, to secure the promised Christmas doll. It was a great disappointment not to receive our box for distribution on that day. But I had Christmas every month, only for those who attended well. I had 125 on the roll this term, but the highest average has been only 20 . Our sewing class greatly improved, and the last week of school I gave the girls industrial lessons in cleaning the schoolroom, washing dishes, and garden making. Our schoolhouse is very comfortable, and everything has been so kindly supplied in the way of school facilities.

Sarahn.-Mrs. J. W. Young, teacher; enrollment, 76; population, Thlingket. Mrs. Young reports:

I have the honor to submit to you the following annual report of the school work at Saxman, Alaska:

During the past term our school has been well attended, commencing September 4, and closing May 11, 1900, having some days an attendance of over 50.

The attendance has been very regular during the winter months. I.usually knew just how many pupils would come each day, as they always came every day when in town. When they had duties to perform or wished to go away they would come and say, "Me hurry up, read quick." They showed great fondness for their studies and an eager desire for promotion. Those who have attended with any degree of regularity have made excellent progress. They are apt in number work. Penmanship and drawing are acquired with apparent ease. None are so dull as not to be influenced by kindness or won by love.

The winter feasting and dancing interfered with their work and lessened for a time their interest. An epidemic of measles prevailed during the winter.

Quite a degree of emulation was excited among them to keep themselves clean. We have washbowl, towel, comb, mirror, etc. I often set the example by cleaning up the smaller ones and combing their hair. The dirty-faced ones were not slow in discovering the contrast.
A sawmill has been built one-half mile north of Saxman, owned and operated entirely by the Tsimpsians, who have shown commendable energy and thrift. A dozen or more houses have been built. They are talking of sending their children here next term, which will make quite an addition to our already large school.

A few deaths have occurred. The sick have suffered severely for want of proper care, as the natives are yery deficient in the line of nursing. A hospital or some means of caring for the sick is greatly needed in this vicinity.

Gravina.-Mrs. Alice B. Hamblet Davis, teacher; enrollment, 61; population, Thlingket. Mrs. Davis reports:

Our school opened on the first Monday in October, 1899. At that time we had many cases of measles and malaria in the village, and some of the little ones afflicted died. This cast a gloom over all the village. Nevertheless, we were able to keep the school doors open to all who might be able to avail themselves of the opportunity of attending.

From the very start the pupils were interested in our school and very eager to learn to speak the English language, notwithstanding the ridicule from those who were not attending school at the time. The English language is rery little known among the children here. There are a few, howerer, who are not slow to learn, and after a few encouragements we were happy to bring these to pronounce distinctly the names of nearly all the objects in the schoolroom, and after a time to answer a few simple questions in English. Then, too, there were a few who already knew some of the language, but were unable to speak it. The difficulty with these we found comparatively small.

It is hard to believe that most of the little ones had been neglected to the extent that they did not know the word for a hat, a dress, fire, wood, or water, nor for any
of the most ordinary objects seen in everyday life. True, the parents could understand and answer simple questions, but it seems to have been taken for granted by them that the new generation would understand the English language without having been taught. But somehow it seems that their little heads were too full of other things so dear to the infant mind to give a thought to a language other than their native tongue. So with these we had to begin from the very beginning and gradually lead them along until now many of our little friends can greet us with a cleas "good morning" and answer any ordinary question very readily.

All grades have advanced one step. Their progress and the good results of work so far have been very satisfactory to teacher and indulgent parents.

The work of the past nine months has been principally on the primary order and confined mostly to the chart and blackboard work.

We have hitherto needed few books, but with the progress that has been made this past year the children will need more books in their future work.

When the children have reached the fourth grade they are able to make rapid progress; for those who have reached this point the coming year will be one of profit and progress. Altogether we may prepare for a successful year.

Our daily average would be higher but that the families have not lived here continuously during the past year. They have gone to other places at various seasons to gather native foods and for other purposes, leaving the village for a time and taking the children with them. This, of course, would diminish our attendance until they returned. Then, too, many a time a child has been kept from school to attend a sick mother or a wee babe. Again, a few have been taken out of school to work in the box factory here. It becomes necessary at times for the children to lend a hand in maintaining the family.

So it is no wonder that, although we have a fair number of pupils enrolled, our average attendance is small. But the grand work of truly educating this people is now begun, and the earnest prayer of every heart here is that it will continue to grow and spread its roots in all directions so that all may receive its benefits.
Sitika Industrial School, Roon No. 1.-Mrs. Selina L. Gamble, teacher; enrollment 90; population, Thiingket. The following is Mrs. Gamble's report:

I am very glad to give you the report of my first year's work in Sitka. When I entered the work in October, 1899, the attendance was 78, and before the end of two months it gradually increased to 90 . Owing to ill health, some pupils left the school before the end of the term.

I am very glad to report a very successful year. Some of my pupils that were in primers when I first took charge of the school have been promoted to higher grades. They have been industrious and interested in their work. I am sure they have made satisfactory progress.

The native children are very fond of music; they have been learning new songs. Every Monday and Friday, at the opening exercises, we spent a few minutes in singing and all the children would take part. The closing exercises of the school were held in the evening of May 29. The children are now enjoying their holiday and are ready for their summer's fun.

Sitra Industrial School, Room No.2.-Mrs. E. C. Heizer, teacher; enrollment, 89; population, Thlingket. Mrs. Heizer reports:

I have just finished my seventh year in teaching in the Sitka Industrial Training School. Many of the pupils have gone out from us during this time and started life alone. To learn to plan for themselves is the hardest lesson for them, but this they can learn only by experience. A number of the boys are working in the mines at Juneau and Douglas Island. One is in a sawmill in Sitka. He has built a very nice home in the Cottage settlement. They frequently call to see us, and love their alma mater. Several of the girls have married and are doing well. Some found the temptations too strong for them and are drifting.

My school this year has had a good regular attendance, as we have had no serious sickness. As I mentioned in my last report, anything of a practical nature interests them. We have had a successful study in practical measurements, making out orders for lumber, auditing accounts, etc.

I have noted a more intelligent interest in reading, especially in their selected readings. Our study of geography from the maps on the wall, used especially in giving them talks on current events, has proven successful. They understand much about our new possessions and Africa by a map study in connection with the wars and the leaders.

Close adherence to phonic spelling has raised our grade in this branch. The vertical system of penmanship is well adapted to our scholars. I will inclose some
specimens of their writing. I feel our interest is due chiefly to the attention given to the little practical things.

A number of talks on the crab brought specimens in to us, and rambles on the beach searching for specimens are frequent.

We feel thankful we are so fortunate in having a good, aggressive superintendent whose zeal is incessant.

Kadiak.-Mrs. Anna A. Hill, teacher; enrollment, 66; population, Russian creoles. The following is Mrs. Hill's report:

I enjoyed teaching the children very much. There are of course many discouragements, but there are encouragements also. I endearored to have the pupils speak English only while on the school grounds. This is hard to do 'as they all talk Russian or Aleut in their homes, but I have been pleased to note a great improvement along this line. Quite a number of the children coming to school for the first time could not understand one word of English. These require much time and care, much more than I could give them; still I enjoyed my chart class immensely, and was pleased to see their faces light up with intelligence as they grasped some new ideas. At Christmas we had a tree and entertainment, all the school taking part in some way. The programme consisted of patriotic and Christmas pieces interspersed with music. I am glad to say that not one of the children had to be prompted, although it meant evening work for two months beforehand. I have to thank Mr. Kashnaroff for his excellent help with the music. The white men of Kadiak kindly contributed such money as we needed to purchase candy, nuts, and apples for all present. The schoolhouse was crowded, and all went away feeling proud of their children.

One great need for these people is true home life. They have very little opportunity for knowing what it means. We made it a point often during the winter months to invite the older children to spend the evening with us, entertaining them in various ways with games, books, etc.

After teaching six months I was compelled to leave, on account of sickness, but secured a substitute who taught two months, when the school was closed for the year. I feel greatly encouraged for the Kadiak school, and look for good things in the future for it.

Wood Island.--Robert G. Slifer, teacher; enrollment, 61; population, Russian creoles and natives. Mr. Slifer reports:

The school work at Wood Island has progressed favorably during the term 1899-1900. The advancement of the scholars has been very rapid in reading and writing, their work being especially good in these lines. In temperance hygiene they have done very well, stress being laid upon the necessity of maintaining hygienic conditions that will have a constant tendency to elevate the average health of the family and the community. This work is very necessary. Many lives could be saved and others materially lengthened if the natives could be taught to observe the simplest rules of sanitary science and hygiene. The anatomical part of physiology has been used principally as an aid to such an end. The instruction in temperance is hindered by the work of a saloon at Kadiak, 2 miles across the bay. In English language the work has been arranged to suit their powers of imitation, almost everything being done by example rather than by rule. History has been taught by a series of stories concerning the great men of the country, interwoven with accounts of the conditions and tendencies that have caused the constant growth of our country in various lines. Geography is a difficult study for the Aleut children, for all they know of the products of the world is what they observe from the lines of goods brought into their communities by the commercial companies. They do not have the least idea of how most things are grown or manufactured. During the past year the attempt has been made to let nothing go by which was not understood by the pupil. Pictures, stories, blackboard illustrations, magazines, advertisements, and in fact anything that the teacher thought would aid his work have been used. The work has necessarily been slow, but it has been more sure. Arithmetic has ever proven their hardest study. The lack of need on the part of their ancestors, coupled with the lack of home training, is partly responsible for this result. In the attempt to make them understand each part, it has been necessary to make slow progress. The oldest class in school was doing fair work in the addition of fractions at the close of the school term.
A great deal of sickness, notably in the months of March, April, and May, lowered the year's record very materially. During the year school was taught 181 days, and the average attendance was 38 . The average monthly enrollment was 45.6. The greatest number of children between the ages of 6 and 21 on the island at any time was about 62 , while the average number of resident children was probably about 54.

For a portion of the year a night school was conducted with very good success. Almost every native man and youth in the village attended. They seemed very glad of the chance to learn, and applied themselves diligently, with the result that the work was a decided success.

The outlook for next year is bright, though the scholars are not all arranged in grades to the best advantage. Something can be done in making the work of this school more thoroughly systematic.
The people are anxious for a night school during all or part of the term. Of course, if this is entered upon, it will increase the teachers' work very materially.

The need for a school building is almost imperative. The room now occupied in the Kadiak Baptist Orphanage is not large enough, and is poorly lighted, especially during the short dark days of winter.

All possible aid was given the teacher by the residents of the place, and was very much appreciated.

Unga.-F. A. Golder, teacher, enrollment, 47; average monthly attendance, 34. Population, white, creole, and Aleut.

The methods applied and the results obtained in teaching children in the States can not be expected here. The experience of each pupil here is very limited; his imaginative faculties undeveloped, his environments discouraging. The fathers and mothers of some of the children are still in a half-civilized state.

In spite of the drawbacks here fair progress has been made. This is mainly due to the good attendance and the special efiorts of the pupils. These results were obtained with the help of the parents and Government officials.

Through the efforts of the ladies of the Apollo mine and the village, and through the generosity of so many of the good people of both places, we were enabled to have a Christmas tree and to clothe all the needy ones of the school and village.
Deputy Marshal L. L. Bowers has also been very kind in conducting the singing school.

The priest of the Russian Church has always been willing to arrange his services as much as possible so as not to conflict with the attendance of the school. The prospects for the coming year are very bright and encouraging.

Unalaska.-Miss Frances Mann, teacher; enrollment, 76; population, Russian creoles and natives. Miss Mann reports:

The enrollment of pupils at the United States school at this place has steadily increased from 27 on September 1, 1899, to 76 at the close of the school year. A large percentage of the attendance is derived from the Greco-Russian Mission; with which institution cordial relations have been established and maintained. Little can be done for the several waifs and strays, who seem to be neither under parental nor mission control, and whose attendance is but desultory and spasmodic. Efforts to regulate this matter have in the past and will in the future for want of compulsory education laws probably prove unsuccessful.

In reading, writing, and spelling most satisfactory results have been attained. The attainment of the pupils in arithmetic, however, though fair, leaves much to be desired.

Various entertainments given with the assistance of the pupils have been made a feature of the term, and a two-hundred-dollar subscription for the Christmas festivities made possible a general distribution of presents, useful or ornanental, to all children in the village.
In the general intercourse of the children with one another English is fast displacing the native or Russian languages; a circumstance doubtless in a large measure ascribed to the rapidly changing social, economic, and industrial conditions of this place.

The morale of the school leaves little to be desired. The children are most tractable and easily led. Disciplining of the mildest sort only need be resorted to.

St. Lawrence Island.-P. H. J. Lerrigo, M.D., teacher; enrollment, 72; population, Eskimo. The following is Dr. Lerrigo's report:

Terms.-School was commenced September 10, 1899, the first term lasting until December 22. The second term opened January 2 and continued without intermission until the end of April. Two days were lost on account of the schoolroom stove proving refractory, owing to defective flues and strong east winds, and filling the room with smoke. One day was omitted following the arrival of the shipwrecked seaman, Mr. Murphy. Total days during which school was held, 152.

The sessions were between the hours of 9 and 12 a . m., with recess of fifteen minutes, and between 1.30 and $3 \mathrm{p} . \mathrm{m}$. These hours were finally adopted after some experimenting and the perusal of my predecessor's experience. For the first few
weeks but one session was held, as there was much work to do about the premises in preparing for winter. At times a two-hour session was held in the afternoon, from 1.30 to 3.30 , but it was found that the children would not submit to a long period of application. With the medical work and miscellaneous duties which fall to the lot of the teacher, my time and strength were so fully occupied as to make it advisable to shorten the session to an hour and a half in the afternoon. Hence the periods above noted were finally decided upon.

The sessions of the school were at times interrupted by incidental experiences, such as the bell being carried away by a strong northeast wind or the chimney pot going by the board. Upon one occasion it was necessary to omit the entire afternoon session in order to attend the native, Ahlonga, who was in serious danger from approaching uræmic coma.

After the 1st of April it was increasingly difficult to maintain proper attendance, owing to the amount of spring work in which the children were obliged to assist their parents. During the latter part of April I found it necessary to omit the afternoon session and accomplished as much as possible during three morning hours. This secured a better attendance and more concentrated effort than would otherwise have been the case.

Ability and progress.-In mental ability the native children seem to compare favorably with those of more civilized countries. Some few are hopelessly dull, but the majority are capable of comprehending and retaining the subjects which engage the attention of white children of similar age. A few are remarkably bright and exhibit capability for mental training to a very considerable extent. The great obstacles in their progress are irregularity in attendance and the lack of the gift of continuity. Their life involves nothing which is calculated to train them for continued mental application. Their work is such as requires physical strength and native acuteness for a little time, aiter which the strain is relaxed and they lapse into a condition of utter idleness until again required to put forth effort. Consequently their faculties for long-continued mental effort are undereloped and the children are unable to follow an extended course of work with the facility of those who have come of more civilized stock. Limited by these drawbacks, however, they have during the past year made an appreciable advance in the use of English, in arithmetic, in geography, and in general knowledge.

Discipline.-Precedent had accustomed the children to moderate talking during school hours, and as it did not interfere with the work, the custom was continued. The discipline was upon the whole well maintained and punishment not frequently necessary. Upon a few occasions dismissing the culprit from the schoolroom seemed to produce a sufficient moral effect.

In June, after the school was closed for the year, during my absence from the village, some of the boys broke into the house and committed trifling pilfering, but took nothing of any great value. Upon this occasion I considered it necessary to take a little more vigorous action and administered corporal punishment to the two leaders, after giving them a moral lecture upon the enormity of their misdeed. The parents came to me almost unanimously apologizing for their children, some of them returning the stolen articles, some bringing payment for the things eaten, while others relieved me of the necessity of further action by thrashing their boys themselves.

Enrollment and attendance. -The number of pupils between the ages of 4 and 19 enrolled was 72.


The attendance was very irregular, as the parents kept their children from school whenever the most trifling work could be found as an excuse, and would not enforce their attendance even when not otherwise engaged, and in many cases the children preferred sleeping or playing to the mental exercise required of them at school. I have constantly urged upon the parents the advantages to their children of an English education, but for the most part it is dealing too much with the future for them
to appreciate it. The two chief men, Shaalook and Asoona, form notable exceptions, sending their children whenever it is at all possible. I have often discussed the general irregularity with them, and Shaalook once suggested that if I would give them breakfast every child in the village would come (and about two-thirds of their parents, I have no doubt), this in their minds being a reasonable advantage attendant upon education.

It has been especially difficult to induce the giris to attend, partly on account of shyness and again because the men do not consider it necessary for the women to be deeply learned. They will sometimes come for several consecutive days and get well started on the alphabet or perhaps numbers, and then absent themselves for a month or six weeks, during which time they will succeed in losing all recollection of their educational attainments and calmly pursue the subject again with the same edifying result.

Classes.-The pupils were divided into four classes, $A, B, C$, and $D$, studying the following branches:

Class A: English (reading-Second and Third Readers and New Testament; grammar, composition); arithmetic (multiplication, short division, long division, traders' accounts); geography (physical, general, United States); drawing.

Class B: English (reading-First Reader. advanced; composition, writing, picture lessons in conversation); arithmetic (addition, subtraction, multiplieation by several figures, short division); geography, Alaskan; drawing.

Class C: English (reading-First Reader; writing, object lessons, conversation); arithmetic (numbers, addition, subtraction, multiplication by one figure); drawing.

Class D (primary): English (object lessons, reading simple words, alphabet, conversation); arithmetic (numbers).

All classes: Vocal music one-fourth to one-half hour; calisthenics.
Point Barrow.-S. R. Spriggs, teacher; enrollment, 82; population, Eskimo. Mr. Spriggs sends the following report of this school-the northernmost on the continent:

I have found myself unable to teach more than thirty-three weeks (eight and onefourth months). School began as soon as the building could be rendered suitable, which was later than desirable, however; it was continued, with a week's intermission at Christmas, till the first of May. As you know, whaling is the industry of this settlement, the entire available portion of every family being given to it. Consequently, when the whaling season began it was useless to try to keep school; the last Friday it was kept all but two of those present said they would be unable to come any more till fall time. So I closed, hoping I might yet teach a week or two more later in the season, but as the whaling crews did not all finally return till the middle of June-and then the families make hurried preparation for their summer work along the coastI considered further attempt useless, so that I am short three weeks of nine months, the usual time I believe which public schools are kept open.

I have endeavored to get a full day's attendance from the pupils, but in the dark days of December and January especially, it could seldom be obtained, so that you see I have not been able to keep a full six-hour day all the time. However, the work has been entered into very heartily by nearly all the pupils and progress has been quite satisfactory. By omitting recesses the full equivalent of a six-hour day was obtained, this method seeming satisfactory to all the pupils, besides being productive, I believe, of better results.

The attendance was naturally better in the deep winter months than in September, October, and April, for in the former two the families were not all in from their hunting and fishing, while in April preparations were going on for whaling. On the whole the year, I judge, has been an average one in most respects. In my opinion, considering that no compulsory school attendance laws are in operation, the attendance is really remarkable. If a child is in from inland even but a day, that day is spent in school, one parent telling me that his little girl was so anxious not to be late at school that she would often start for school minus her breakfast. A number of those enrolled are from Noowook (Point Barrow proper); they came to this village and lived with friends or relatives that they might also attend school. Parents generally wish their children to attend the school and acquire all they can, though if put to a test the child's preference prevails, not merely in matters of school, but also nearly everything.

For work here, even among the children, a knowledge of the language is an absolute necessity, consequently I have given much time to it-something needed as you can imagine when I say there are over 400 forms to the verb and over 225 to the noun. Even such a simple word as corresponds to our "some" or "other" is declined through over 200 different forms.

I inclose a photograph which my wife took of the school last February. It contains some 55 of the 82 enrolled pupils. Their bright, intelligent appearance corresponds to their apt and generally bright minds. Last year I asked for slates. I trust they will arrive; we badly need them. The atmospheric conditions vie with the children in destructiveness. Slate pencils will be needed another year, also more
copy books and ink．A most desirable addition is a globe．Even such a one as sells for 15 cents would be valuable，though a large one would illustrate better．

Last year（1899）you sent some of Baldwin＇s Readers．They are the best adapted to the needs and abilities of the children of any books here．An additional supply of them－the first and second readers－will become a necessity for the oncoming intermediate class．

The pupils could best be managed when grouped in three divisions，viz，primary， intermediate，and advanced．

The primary department enrolled 27 males， 17 females；total， 44 ．
The intermediate enrolled 13 males， 9 females；total， 22 ；while the advanced class enrolled 12 males， 4 females，two of the 12 males being adults．

The following subjects were taught：
English．－This was the fundamental course throughout the year，more time being given to it than to the other studies because，being the basis of teaching in all the other subjects，its importance was continually seen and feil．

The advanced section used readers．
The intermediate were drilled in words，sentences，also in spelling and reading，and the primary section were inducted in part into the alphabet and names of familiar objects，this to be used as a basis of future work in the teaching of English．Writing （copy books）was enjoyed by nearly all the members of the two upper departments．

Next in importance to English comes arithmetic．For the advanced section this has meant the gaining of an insight as to what numbers really mean，facility in count－ ing，translating their numerals into our simpler and elastic ones，addition，subtrac－ tion，a partial mastery of the multiplication tables and practice in their operation， both by multiplication and division．To this was added examples，practical and useful，to illustrate the usefulness of what had been acquired．

The adranced section was also given lessons on the outlines of American history and also in drawing simple straight－line delineations．One or two lessons were given each week in physiology and hygiene to the three sections．

It has been my constant effort to make the school work as interesting and instruct－ ive as possible，and I feel that in part at least I have succeeded．

One element omitted in the report is that of ages．These it is impossible to obtain， the Eskimos having kept no record of years in the past；but on the average the pri－ mary class includes all those from about 9 years down，the intermediate between 9 and 12，and the advanced from 12 to 15 or 16 ．The two adults reported were about 20 to 22 years of age．

Historical table—Siatistics of public schools in Alaska， 1892 to 1900.

| Schools． | Length of school term and enrollment of pupils． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1892－93． |  | 1893－94． |  | 1891－95． |  | 1895－96． |  | 1896－97． |  | 1897－98． |  | 1898－99． |  | 1899－1900 |  |
|  |  | $\begin{aligned} & \text { 药 } \\ & \text { 品 } \\ & \text { 药 } \\ & \text { an } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  | \＃ \＃ \＃ 葡 |
| Southeast Alaska． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No． 1 （whites）． | 9 | 50 | 7 | 13 | 9 | 57 | 9 | 40 | 9 | 39 | 9 | 42 | 9 | 31 | 9 | 47 |
| No． 2 （natives） | 9 | 48 | 9 | 110 | 9 | 180 | 9 | 156 | 9 | 154 | 8 | 170 | 9 | 175 | 9 | 184 |
| Juneau： <br> No． 1 （whites） | 9 | 23 | 9 | 25 | 9 | 54 | 9 | 70 | 9 | 86 | 9 | 72 | 9 | 74 | 9 | 96 |
| No． 2 （natives） | － | 61 | 9 | 65 | 9 | 50 | 9 | 67 | 9 | 70 | 9 | 40 | 9 | 71 | 9 | 70 |
| Douglas： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No． 1 （whites）． No． 2 （whites）． | 8 | 13 | 9 | 30 | 9 | 42 | 9 | 57 | 7 | 75 32 | 9 9 | ${ }_{25}^{46}$ | 9 | 70 28 | 8 | 100 37 |
| Douglas（natives） <br> Skagway（whites）， |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wrangell（whites and natives） |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 9 | 49 | 9 | 54 | 7 | 61 | 8 | 82 | 9 | 64 | ， | 71 | 9 | 80 | 9 | 114 |
| Jackson（natives）．．．． | ， | 82 | 8 | 90 | 7 | 80 | 8 | 64 | 9 | 81 | 9 | 121 | 9 | 67 | 9 | 51 |
| Haines（natives）．．． | 9 | 51 | 9 | 41 | 9 | 64 | 8 | 60 | 8 | 68 | 7 | 46 |  |  | 8 | 64 |
| Hoonah（natives）．．．．）Mfetlakahtla（natives） |  |  |  |  |  |  | 8 | 144 | 5 | 120 | 9 | 141 | 9 9 | 126 | 9 | 125 |
|  |  |  |  |  | 6 | 105 | 7 | 31 | 8 | 75 | 8 | 63 | 9 9 | 144 62 | 9 | 76 |
| Saxman（natives）．．．． <br> Killisnoo（natives） | 9 | 137 | 5 | 75 |  |  |  |  |  |  |  |  |  |  |  |  |
| Killisnoo（natives）．． <br> Klawock（natives）．．． |  |  |  |  | 2 | 50 |  |  |  |  |  |  |  |  |  |  |
| Gravina（natives）．． |  |  |  |  | ．． |  |  |  |  |  |  |  |  |  | 5 | $\stackrel{61}{23}$ |
| Kake（natives） |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 | $\begin{aligned} & 23 \\ & 87 \end{aligned}$ |

Historical table—Siatistics of public schools in Alaska, 1892 to 1300-Continued.


Public schools in Alaska, enrollment and attendance of pupils during 1899-1900.

| Schools. | 1899. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | September. |  | October. |  | November. |  | December. |  |
|  |  |  |  |  |  |  |  |  |
| Sitka. Southeast Alaska. |  |  |  |  |  |  |  |  |
| No. 1 (whites).. | 35 | 27 | 42 | 33 | 44 | 37 | 43 |  |
| No. 2 (natives). | 55 | 16 | 76 | 15 | 92 | 32 | 95 | 42 |
| Juneau:No.1 (whites) ...............................63 |  |  |  |  |  |  |  |  |
| No. 1 (whites) | 63 | 47 | 59 | 48 | 61 | 48 | 59 | 43 |
| No. 2 (natives) | 25 | 12 | 17 | 12 | 19 | 13 | 29 | 16 |
| Douglas: |  |  |  |  |  |  |  |  |
| No. 2 (whites). | 20 | 19 | 20 | 17 | 20 | 19 | 20 | 18 |
| Skagway (whites) | 144 | 95 | 158 | 145 | 167 | 150 | 157 | 122 |
| Wrangell (whites and natives) | 55 | 27 | 43 | 23 | 30 | 20 | 47 | 26 |
| Jackson (batives).... | 25 | 16 | 32 | 19 | 37 | 32 | 39 | 35 |
| Hoonah (natives). | 31 | 10 | 52 | 13 | 59 | 15 | 67 | 20 |
| Saxman (natives) | 18 | 6 | 20 | 10 | 46 | 23 | 54 | 32 |
| Haines (natives). | 39 | 10 | 21 | 6 | 46 | 16 | 01 | 12 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Kake (natives) |  |  |  |  | 23 | 19 | 73 | 37 |
| Western Alaska. |  |  |  |  |  |  |  |  |
| Kadiak (whites and natives) | 45 | 28 | 58 | 44 | 51 | 45 | 59 | 45 |
| Unga (whites and natives) . | 37 | 32 | 39 | 37 | 38 | 36 | 39 | 35 |
| Unalaska (whites and natives) | 32 | 30 | 53 | 48 | 53 | 48 | 53 | 48 |
| Wood Island (natives).......... | 41 | 35 | 45 | 38 | 47 | 39 | 49 | 39 |
| Arctic Alaska. |  |  |  |  |  |  |  |  |
| St. Lawrence Island (natives) |  | 21 |  | 23 |  | 24 |  | 25 |
| Point Barrow (natives) | 45 | 19 | 51 | 21 | 57 | 26 | 63 | 29 |

Public schools in Alaska, enrollment and attendance of pupils during 1899-1900-Cont'd.


The following table shows the history of Congressional appropriations for education in Alaska:

First grant to establish schools, 1884
$\$ 25,000.00$
Annual grants, school year-
1886-87
15, 000. 00
1887-88
25, 000. 00
1888-89 40, 000.00
1889-90 $50,000.00$
1880-91 50, 000. 00
1891-92 50, 000. 00
1892-93 40, 000. 00
1893-94 30, 000. 00
1894-95 30, 000. 00
1895-96 30, 000. 00
1898-97 30, 000. 00
1897-98 30, 000. 00
1898-99
30, 000. 00
1899-1900
$30,000.00$

Expenditure of appropriation for education in Alaska, 1899-1900:
Amount appropriated...-.-................................................................ $\$ 30,000.00$
Salaries of 3 officials . . . . . . .-. .-. ......................................................... $4,580.00$






Freight ....................................................................................... 299.91
Balance for outstanding liabilities ................................................. . . . . 725.92
$30,000.00$
Cost per capita of enrollment, $\$ 17.45$.

## PERSONNEL.

Dr. Sheldon Jackson, general agent of education for Alaska; Wiiliam Hamilton, assistant agent of education for Alaska; William A. Kelly, superintendent of schools for the southeastern district of Alaska.

Teachern in pmblic schools.

| School. | Teacher. | State. |
| :---: | :---: | :---: |
| Sitka, No. 1 <br> Sitka, No. 2 <br> Juneau, No. 1 <br> Juneau. No. 2 <br> Douglas, No. 1 <br> Douglas, No. 2 .............. <br> Skagway (4 schools).... <br> Wrangell, N゚o. 1 <br> Wrangell, No. 2 <br> Jackson. <br> Haines. <br> Hoonah. <br> Saxman. <br> Gravina. <br> Dyea. <br> Kake <br> Kadiai <br> Wood Island <br> Unga . <br> Unalaska. <br> St. Lawrence Island <br> Point Barrow <br> Sitka Industrial School. | Miss Cassia Patton Mrs. N. A. Saxman Charles C.Solter. Miss Jennie E. Larsen Miss Elizabeth Saxman Mirs Gortrude H. Spiers Miss Molie MacAvey O. 8. क्रिill Anve Claven Miss T. U. Wobster. Mis, Nellie Green C. C. Cunningham Mrs. C.Taylor Miss May Mackintosh Mirs.J. W. Mcramand. Young. <br> iss alice B. Hamblet <br> Mrs. Anna T Mon <br> Mrs. Annie A. Fill. <br> Robert G. Slifer. <br> Frank A. Golder <br> Mies Frances Mann <br> P. H. J. Lerrigo, M. D Samnel R. Srriggs. <br> Geo. J. Beck <br> Miss Olga <br> Mrs. M <br> Mrs. E. C. Heizer. | Pennsylvania. <br> Alaska. <br> Kansas. <br> Alaska. <br> Pennsylyania. <br> Kansas. <br> Do. <br> Wiest Virginia. <br> Alaska. <br> Do. <br> Do. <br> Do. <br> Kansas. <br> Alaka. <br> Do. <br> Do. <br> West Virginia. <br> Washington. <br> Alaska. <br> Do. <br> Do. <br> Do. <br> Pennsylvania. <br> Do. <br> Washington. <br> New York. <br> New Jersey. <br> Alaska. <br> Do. <br> Do. <br> Do. <br> Do. |

The local school committees as at present constituted are as follows:
Sitka: John G. Brady and Edward de Groff, appointed January 15, 1891; Rev. Anthony Dashkevich, appointed May 14, 1900.

Juneau: John G. Heid, appointed January 15, 1891; B. M. Behrends and J. B. Denny, appointed January 24, 1900; Rev. John B. René, S. J., appointed March 10, 1900.

Douglas: School No. 1, P. H. Fox, appointed January 15, 1891; C. A. Hopp, appointed September 26, 1899. School No. 2, R. J. Willis and William Mackie, appointed July 25, 1889.

Wrangell: Thomas Willson, appointed March 29, 1892; Rev. H. P. Corser, E. P. Lynch, T. G. Wilson, appointed February 20, 1900; William Lewis (native Alaskan), appointed May 14, 1900.

Skagway: I. N. Wilcoxen, Frank A. Wise, appointed August 1, 1899; J. M. Winslow, I. D. Spencer, Mrs. M. J. Snyder, appointed October 24, 1899.

Dyea: Jerome Andrews, G. C. Teal, J. Huebner, appointed February 20, 1900.
Kodiak: Frederic Sargent, appointed July 22, 1893; Wm. J. Fisher and P. D. Blodgett, appointed March 21, 1900.

Unga: C. M. Dederick, appointed September 22, 1894; George Levitt and P. K. Guild, appointed November 30, 1899.

Saxman: James W. Young, W. L. Bunard, Rev. Edward Marsden (native Alaskan), appointed April 9, 1900.

Gravina: Mark Hamilton, Roderick Murchison, Benjamin Dundas, Mfred B. Atkinson, appointed April 9, 1900, all of whom are native Alaskans.

Nome: Walter Church, D. J. Elliott, Jno. Brynteson, Dr. S. J. Call, appointed June 11, 1800; D. W. McKay, S. A. Keller, E. S. Ingraham, J. V. Logan, appointed July 10, 1900.

The following list contains the names of former members of local school committees in Alaska:

Sitka: Hon. James Sheakley, N. K. Peckinpaugh, Dr. C. D. Rodgers; Juneau: Karl Koehler, Rev. Eugene S. Willard; Douglas: G. E. Shotter, S. R. Moon, Robert Duncan, jr., Albert Anderson, A. J. Campbell; Wrangell: W. G. Thomas, William Millmore, Allan Mackay, Rufus Sylvester, Finis Cagle; Jackson: James W. Young, W. D. McLeod, G. Loomis Gould; Metlakahtla: William Duncan, Dr. W. Bluett, D. J. Leask; Unga: N. Guttridge, John Caton, Edw. Cashel; Unalaska: N. S. Resofi, N. B. Anthony, L. R. Woodward; Skagway: Thomas Whitten, E. L. Niskern, Walter Church, F. R. Burnham.

The members of these committees have been of good service to the Bureau of Education, both as correspondents and by acting as auditors, countersigning the bills sent in for various local expenses of these schools, inspecting repairs, and giving advice as to measures for the greater efficiency of the schools.

For the southeastern section of Alaska a local superintendent was appointed as early as 1890 and has been in service ever since. The present local superintendent is William A. Kelly, of the Sitka Industrial School. His duties are to visit the schools, report on their condition, and examine candidates for the position of teacher.
missionaries and teachers at mission stations in alaska.

## Presbyterian.

Presbyterian missionary.—Rev. Sheldon Jackson, D. D.
Eagle City.-Rev. and Mrs. James Wollaston Kirk; no organization.
Haines.-Rev. and Mrs. W. S. Bannerman; 52 communicants.
Hoonch.-Rev. and Mrs. William W. Carle; Mir. Willis Hammond (native), interpreter; 104 communicants.

Wrangell.-Rev. H. P. Corser; 84 communicants.
Jackson.-Rev. and Mrs. D. R. Montgomery; Mr. Samuel Davis (native), interpreter; 98 communicants.

Juneau.-Rev. and Mrs. L. F. Jones; Rev. and Mrs. J. H. Condit; Mr. Frederick L. Moore (native), interpreter and assistant at Douglas Island (station); 28 white and 124 native communicants.

Nome.-Self-supporting.
Point Barrow.-Rev. and Mrs. H. R. Marsh, M. D.; Mr. Koonooya (native), interpreter.

Prince of Wales Island.-Rev. and Mrs. David Waggoner (under appointment.)
Saxman.-Rev. Edward Marsden (native) ; Mrs. Hannan (native), interpreter; 23 communicants.

Skagway.-Rev. and Mrs. N. B. Harrison; 32 communicants.
St. Michael.-Rev. M. Egbert Koonce, Ph. D.
Sitka.-Mrs. Matilda K. Paul (native), interpreter; $2 \frac{1}{4}$ white and 349 native communicants.

Sitka Hospital.-B. K. Wilbur, M. D., physician and surgeon; Miss Esther Gibson, head nurse; Miss Anna Hinds (native), assistant nurse.

Sitka training school.-Mr. William A. Kelly, superintendent; Mr. Dean W. Richards, assistant superintendent; Miss Susan Davis, Miss Sadie Martindale, Miss Anna M. Sheets, Miss Lucile Owen, Miss Frances H. Willard (native), matrons; Mr. John E. Gamble, Mr. Howard George (native), teachers. Rev. S. Hall Young, D. D. (on furlough).

Teller.-E. J. Meacham, M. D. (not commissioned).

## Episcopalian.

Sitka, Bishop Peter Trimble Rowe, D. D., and wife.
Juneau, Rev. H. J. Gurr.
Skagway, Rev. J. G. Cameron ; Miss H. Lidstrom, matron of hospital.
Ketchikan, Miss Agnes Edmond.
Circle City, Dr. James L. Watt, Mrs. James L. Watt, Miss E. M. Deane.
Fort Yukon, Rev. L. J. H. Wooden.
Rampart City, Mr. E. J. Knapp.
Fort Adams, Mr. A. A. Selden, Miss Selden.
Anvik, Rev. J. W. Chapman, Mrs. Chapman, Miss B. W. Sabine, Miss A. C. Farthing, A. R. Hoare.

Point Hope, Dr. John B. Driggs.
Native assistants: Blind Paul, Neenahnah; P. Bolah, Nuhklakuhyet; I. Fisher, Anvik; J. Kwulwull, Circle City; W. Loola, Fort Yukon; Stephen, Nowikakat; Paul Williams, Nuhklakuhyet.

## Moravian.

Bethel, Rev. J. H. Romig, M. D., Mrs. J. H. Romig, Rev. Joseph Weinlick, Mrs. Joseph Weinlick.

Ougavigamut, Rev. Benjamin Helmich, Mrs. Benjamin Helmich.
Carmel, Rev. J. H. Schoechert, Mrs. J. H. Schoechert, Rev. Samuel Rock, Mrs. Samuel Rock; Miss Philippine C. King, trained nurse.

Several native assistants.

## Friends.

Kotzebue, Robert Samms, Mrs. Robert Samms, Miss Martha Hadley.
Noıne, Mrs. Anna H. Foster.
Douglas, Charles Replogle, Mrs. Charles Replogle, Miss Jennie Lawrence.
Kake, Silas R. Moon, Mrs. S. R. Moon.
Baptists.
Wood Island, Rev. Curtis P. Coe, Mrs. C. P. Coe, Miss Hattie Denniston, Mrs. M. G. Campbell.

> Methodist Episcopal.

Unalaska, A. W. Newhall, M. D., Mrs. A. W. Newhall, Miss Ella A. Darling.

Congregational.
Cape Prince of Wales, MIr. W. T. Lopp, Mrs. W. T. Lopp. Native assistants, Sokweena and Elobwok.
Nome, Rev. Raymond Robbins.

## Swedish Evangelical Mission Covenant.

Yakutat, Rer. Albin Johnson, Mrs. Agnes Johnson.
Unalaklik, Rev. Julius Qvist, Rev. A. E. Karlson, Mrs. A. E. Karlson, Miss Selma Peterson, Stephen Ivanoff (a native worker), Mirs. Ivanoff, Mrs. Ojeark Rock.

Golofnin Bay, Rev. J. Hendrickson, N. O. Hultberg, Mrs. N. O. Hultberg, Miss Amanda Johnson, Rev. P. H. Anderson, Mrs. P. H. Anderson.

Roman Catholic.

Juneau, Rer. John B. René, S. J.
Dawson, Northwest Territory, Rev. William Judge, S. J., chaplain of the hospital and of the Sisters of St. Ann; Brother Bernard Cunningham, lay brother.

Koserefski (Holy Cross Mission), Rev. R. J. Crimont, S. J. (superior); Rer. John Lucas, S. J.; Rev. A. Robaut, S. J.; Rev. F. Monroe, S. J.; Rev. J. B. Post, S. J.; Brothers T. O'Hare, S. J.; B. Marchisio, S. J.; J. Twohig, S. J.; P. Brancoli, S. J.

Nulato, Rev. J. Jetté, S. J. (superior); Rev. A. Ragaru, S. J.; Rer. J. Perron, S. J.; Brothers C. Giordano, S. J., and J. Negro, S. J.

Dayson Hospital, Sisters of St. Ann; Mary Zephirine (superior), Mary of the Cross; Mary Pauline, Mary Joseph, Mary John Damascene, Mary Prudentia.

Koserefski (Holy Cross Mission, girls' school), Sisters Mary Stephen (superior), Mary Prudence, Mary Seraphine, Mary Winifred, Mary Benedict, Mary Antonia, Mary of the Passion, Mary Magdalen.

Orthodox Russo-Greek missionaries and churches in Alasket.
Sitka, Rev. Anthony Dashkevich.
Juneau, Rev. Alexander Yarosherich.
Killisnoo, Rev. John Soboleff.
Nu:hek, Rev. Constantine Pauloff. Chapels: Tatitlak, Kanihlak, Chanig.
Kenai, Rev. John Bortnorsky. Chapels: Alexandrorsk, Selderoe, Nenilchik, Kusitan, Tayounak, Shushitno, Knik, Wood Island.

Kadiak, Rev. Tikhon Shalamoff. Chapels: Spruce Isłand, Uzenkoe, Shiok, Anhtalik, Trehsriatitelskoe, Arlovo.

Afognak, Rev. Nicholas Kashevaroff. Chapels: Karluk, Katmai, Kagnak, Duglass.
Belkorshy, Rev. Euthemius Alevine. Chapels: Unga, Korovinskoe, Peregrebenskoe, Protaserskoe, Chigit, Mitrofanierskoe, Samnahk.

Unalaska, Rev. Alexander Kedrovsky. Chapels: Atha, Attu, Borca, Makushi, Kashig, Chernovskoe, Akutan, Ummak.

St. George (island), Rev. Peter Kashevaroff.
St. Paul (island), Rev. Nicholas Risefi.
St. Michael and Ikogmiut, Rev. James Korchinsky. Chapel: Koshlik.
Kuskokvim (Pavlovskoe), Rev. John Orloff.
Nushagak, Rev. B. Kashevaroif. Chapels: Ekuk, Kaluak, Paugrik, Igiashk, Ugashek, Ikagmiut, Inagnasha, Iliamna, Kichek, Aliagnak, Knagnak, Kagvak, Kahonak, Agimek, Tugiak.

Schools and teachers.-Sitka, Rev. Anthony Dashkevich, Sergius Popofi, Gabriel Cherepnin. For Indian school, Rev. Methodius; Juneau, Rev. A. Yaroshevich and George Corcoran; Killisnoo, Rev. J. Soboleff; Nuchek, Rev. C. Pauloff and Alexandroff; Kenai, Rev. J. Portnovsky and Alex. Iranoff; Alexandrovskoe, Munin;

Seldovoe, A. Demidoff, Minichek, and Kvasnikoff; Taiunak (vacant); Kadiak, Rev. T. Shalamoif and Andrew Kashevaroff; Afognak, Rev. N. Kashevaroff; Belkovsky, Rev. E. Alexine; Unga (vacant); Cannah, Nedorezoff; Protasievskoe, Kochutin; Korovinskoe, Chebatnog; Mitropanievskoe, V. Stefanoff; Voznesenskoe, Stepiannik; Chignik, Tulupiak; Unalaska, Rev. A. Kedrovsky, M. Skibinsky, V. Mainoff, Leontius Sivtsoff; Makush, Krukoff; Borca, Tastorgueff; Chernovskoe, Gordeeff; Umuak, Krukofi; Kashiga, Kudrin; Akutan, Petuchoff; Attu, Prokopieff; Atkha (vacant); St. Paul, Rev. N. Riseff; St. George, Rev. P. Kashevaroff; Nushagak, Rev. B. Kashevaroff; Kukon, Rev. J. Korchinsky; Kuskokvim, Rev. J. Orloff.

PRESBYTERIAN MISSIONS IN ALASKA.
The Rev. George F. MicAfee, superintendent of school work, Presbyterian Board of Missions, has kindly prepared the following account of the board's work in Alaska:
The first station reached by the steamers going north is:
Saxman.-The Rev. Edward Marsden, a native Metlakahtlan, has been the missionary here since the beginning of his ministry, three years ago. His labors have been various, incessant and successful. By the kindness of some friends he has a steam launch, so essential to missionary work among these islands. He has preached with more or less regularity not only at Saxman, but at Gravina, Ketchikan, and other points. There is a new church at Gravina which holds regalar services either under the conduct of the missionary or of some native helper. The same is true at Ketchikan, a town of several hundred people, already well stocked with saloons and other devices for destroying the natives. At Boco de Quadra services have been held in a private dwelling. Those who could not gain entrance stood about the open doors and windows within reach of the preacher's voice. One peculiar feature of the sarvice in that place is the presence of six or more nationalities, such as Thlingits, Tsimpsheans, Hydahs, Norwegians, English, Chinamen, and occasionally some Italians.

Mr. Marsden, realizing the necessity of industrial education for the natives, has led them to various industries, the principal ones being a sawmill and a salmon cannery, which it is hoped will become a source of profit before long. Being a musician himself he has interested the young men of the community in a brass band, has secured the necessary instruments and has taught them, so that their music enlivens the services.

Last summer Mr. Corser, our missionary at Fort Wrangell, and Mr. Marsden successively visited the Indian tribes on the west coast of Prince of Wales Island. There is a tribe of Klawack Indians there numbering about three hundred, who had been somewhat instructed in the rudiments of Christianity by William Benson, at one time a pupil in our Sitka school. He had adopted the methods of the Salvation Army and had won them to at least a formal recognition of Christianity. When our missionaries visited them they found them anxious that some one should be sent to teach the way more perfectly. They put up a very earnest prayer that God would stir His church to send them a missionary. This prayer has been answered, and Mr. David Waggoner, about to graduate from Park College, is commissioned to take up missionary work among them. He and his bride will sail for their new station early in the summer.

About 50 miles west of Saxman is Jackson, the home of the Hydah Indians. The Rev. and Mrs. D. R. Montgomery began their work there last year. They have already seen marked results of their labors. Soon after reaching their field Sabbath school was organized, at which on the first Sabbath 41 scholars were in attendance. Native teachers meet with the pastor on Saturday evenings and devote an hour or more to the study of the lesson. On the next day they communicate, in their own language, what they have learned to eager classes of the Indian children gathering about them. A Christian Endeavor Society was organized with 19 active members, which has since been increased to 60 . Already the missionary reports an improvement in the morals of the community, and his endeavor to win the Indians away from some of their heathen practices by the attraction of the gospel has not been without success. There is more or less development in mining directions along that coast, and the missionary will have his hands full not only with the native work, but among the white people as well. Thus he reports Sabbath congregations numbering about 100 , of whom one-fourth are white people.

The Rev. Harry P. Corser continues his work in the two churches, white and
native, at Fort Wrangell. There, as elsewhere in Alaska, the saloon is the terrible foe of Christian work in the lives and character of the natives.
During the winter months the missionary has held 8 services a week-5 for the Indians and 3 for the whites. The attendance has been unusually good. There have been quite a number of accessions to the Indian church. The Sabbath schools, both white and native, have been in a flourishing condition, and one of the good signs of the work is in the statement made that there has not been an Indian dance during the winter and that the native potlatch feasts that have been held have lost much of their heathen significance.
Mr. Corser has been anxious to remove his Indians from Wrangell to some island where, shut in by the sheltering arms of the sea, they might carry on industries which would make them self-supporting. A few thousand dollars could not be more profitably invested than in a loan to these Indians to enable them to build a sawmill and a salmon cannery, and thus not only train themselves in habits of industry, but also conduct a business which would ultimately be profitable.

The next station is the historic Juneau, where for ten years in the native church the Rev. L. F. Jones has been our faithful and successful missionary. His work has grown so rapidly that now they urgently need a much larger building. There is prospect that a new church will soon be built. There has not been a communion season during the year in which there have not been many accessions on profession of faith. The rrogress which the natives are making is illustrated by the fact that by their own voluntary efforts they have built and paid for a fine, broad board sidewalk the full length of their village, and have put electric lights along the street. They are also installing lights in their houses-quite an advance for them. They still observe some of their native feasts, but not with the frequency with which they once held them nor with their old-time baneful features. Those feasts are on the wane, and, like some other old customs, are destined to become obsolete.

Across the bay on Douglas Island the branch mission conducted by Mr. Jones, assisted by his interpreter, Mr. Fred L. Moore, is also in a thriving condition. A building was leased and the attendance has been growing-the house being often packed at the service. A building will soon be given them.. A number who have joined the church at Juneau are those who have been converted in this out-station on Douglas Island. Mr. Moore, Mr. Jones's native assistant, is an excellent interpreter, and has been doing faithful work in both stations.

Mr. Bannerman continued his faithful service at the white church until the 1st of January, when he was transferred to the work at Sitka, Mr. McClelland, the pastor at Sitka, having accepted a call to Portland, Oreg. The Rev. J. H. Condit, who had given several years of strong service to the Juneau work, entered upon it again in January last, was warmly welcomed by the people, who had learned to love him, and is anticipating a useful and happy service.

The work at Sitka in all its varied departments continues strong. The school and hospital work have been continued, as usual. An effort is being made to enlarge the industrial part of the course in the school. It is strongly realized that the natives must be taught industries upon which after leaving school their living for the most part will depend.

Passing northward now from Sitka we come to the island of Hoonah, where Mr. and Mrs. Carle have had a year of eventful work. Heathen customs were strong there. The influence of the liquor traffic reached even that lonely station, and the missionary has had to stand against great odds. During the summer the village is practically deserted by the natives, who are off on fishing excursions or employed in canneries stationed on the various islands near them. The missionary says if he had a boat he could have large audiences almost all summer by going to these fishing places. Indeed, boats are a necessity for successful missionary work in that watery land. When in the autumn the Indians came back from their wanderings the church work took on much encouragement; not indeed in the increase of members-rather the contrary. It was a time of sifting. Many were dropped from the roll because of inconsistent lives or open sin. Drunkenness was chargeable with a large part of the trouble, and the drunkenness came through the influence of white men in bringing the deadly liquor to the island. But some stood firm, though they had to stand in the midst of an awful storm of temptation. The grace of God was conspicuous in the rescue of some from their heathen practices, and while the number of members has not increased the missionary is sure that there is a remnant who are genuinely saved. Some had made great sacrifices for Christ. One old woman, going to church with difficulty, leaning on a heavy stick to help her walk, has scarcely missed a service since she saw the light. When a request for a Christmas offering was made she took her three bracelets from her arms, stood and prayed, then brought them and laid them on the table, together with 5 cents. The money obtained from a sale of these brace-
lets has gone into the home-mission treasury. Has she not cast in more than they all? For out of her poverty she has cast in all that she had.

Haines.-The Indian work here, among the Chilkats and Thlingits, has been for many years under the care of the Rev. W. W. Warne, who retired from it on the 1st of January, more than 50 new members having been added to the roll. The services are held in the school building, which is not large enough to accommodate the audiences. Frequently many have to go away for lack of room.
The station is being supplied at present by Mr. Robert Falconer, a member of the church at Skagway. As the result of the large output of the Porcupine gold mines and the discovery of new fields in the same vicinity, there has been quite a rush of white people in that direction. Every indication is that in the near future Haines will be quite a mining town.
About 15 miles north of Haines, at the head of the Linn Canal, is the interesting and important little city of Skagway. The Rev. and Mrs. Norman B. Harrison have been our missionaries there since June, 1899. Within that time church property has been bought and paid for, including an audience room, lecture room, and parsonage. There is much spiritual life in all the departments of the church work. Skagway, although subject to the fluctuating influences incident to those mining towns, will always be an important point. It is the beginning of the railroad to the interior and will therefore always command a large trade. The church expects to be self-supporting, possibly this year.
Eagle City.-There is now easy communication with Skagway, by railroad to Lake Bennett and thence by steamer down the Yukon. Eagle is one of the most important military posts in the territory. The Rev. James Wollaston Kirk and his wife report a year of faithful service, though under many difficulties. The stampede of the miners down the river to Cape Nome almost depopulated the town. During the winter they have had to conduct their work for weeks at a time in weather ranging from 50 to 73 degrees below zero. Perhaps the most notable feature of progress was in the building and equipment of a reading room, the privileges of which are enjoyed by the soldiers, miners, and others. Mr. Kirk's home continues to be the center, religious and social, of that community. No church has been organized, but the good seed has been sown and evidence has not been wanting that in some places it has taken root and is bearing fruit.

Rampart.-The Rev. M. Egbert Koonce, Ph. D., remained at that station until last summer, when it was deemed advisable by him to follow the people down the river. He found himself in the autumn the only minister at St. Michael, the seaport town and military garrison at the mouth of the Yukon. To the people shut in there during the winter he has been preaching the gospel and doing missionary work as he has been able, anticipating, when the breaking up of the spring should come and the tide of miners should flow toward the interior, to go rith them. This itinerating work admits of few localizing results; but is absolutely essential if in the feverish and Godless camps there is to be any voice of cheer and of hope for the tempted, sick, and often discouraged and dying miners.

Cape Nome.-A self-supporting Presbyterian church was organized last winter under the labors of the Rev. S. Hall Young, D. D. Worn out with a long sickness he came back to the States for rest in October, and has since been addressing churches in the East in the interests of that land to which he has given so many years of faithful and heroic service. Before leaving Nome he sent an elder of the Nome church to Teller, a point 75 miles northwest on the coast. This elder has been holding meetings during a long and lonely winter in that station, which, though desolate now and having few people, it is believed will have a considerable population during the coming summer.
Passing still farther north, we came to St. Lawrence Island, where a company of Indians, many of them Christian, are anxiously waiting for a missionary to be their helper and guide.
Still farther north, at the top of Alaska, perhaps the remotest and loneliest missionary station on the globe, we came to Point Barrow. The Rev. and Mrs. H. R. Marsh, M. D., have held that station for three years. They came out for a vacation last fall and have been presenting the interests of the work to churches in the States. The fruit of the few yea service on that stormy coast is well expressed by the fact that the lay representative to this general assembly from the presbytery of the Yukon is an Eskimo elder in our Point Barrow Church. Dr. and Mrs. Marsh and this elder return to their homes immediately after the sessions of the assembly. The school work continues under the care of the Rev. and Mrs. Samuel R. Spriggs, who, during the absence of Dr. Marsh have also conducted the religious services.

On the whole, both the native and the white work in this great Territory has been blessed during the past vear. Especiallv among the various tribes of Indians has it
been fruitiul; many have been converted-many that had fallen away have been reclaimed; feasts and other heathen customs have been less observed, and the standard of morality has been distinctly raised. It is the opinion of Governor Brady and others cognizant of the capacities of Alaska that one not only of the largest but of the richest and strongest States of the Union will ultimately be starred on our flag under the name of Alaska. May the church keep abreast with the progress of events.

Sitka Training School.-Teachers, 9 (2 of whom are natives); pupils, boarding, 147; day, 4; total, 151; salaries, $\$ 6,818.73$; current expenses, $\$ 8,874.59$; total, $\$ 15,693.32$. Received from trition, $\$ 297.10$.

During the year the Sitka training school for native boys and girls has been successfully conducted. The teachers are well qualified for the positions they occupy, and both in the class room and in the industrial departments the work is conscientiously and well done. The carpenter shop and boat-building shop are under the management of two competent mechanics who thoroughly understand their business. In these the young men are taught trades which will enable them to make for themselves an honest support in the future. The shoe shop, in which is manufactured every pair of shoes worn by the entire school, is under the direction of a native Alaskan, who learned his trade in this school. This shop brings in considerable income from work done for outside parties. The sewing classes, cooking classes, and science kitchen are all under the direction of trained instructors, who are preparing the girls to become good hotisewives. As a result, Sitka is turning out numbers of young men and young women who are not only well trained in the industrial arts, but are grounded in Christian principles.

Sitka Hospital.-Physician in charge and two nurses; inpatients, 179; outpatients, 1,751 ; total, 1,960 . Salaries, $\$ 1,830.34$; current expenses, $\$ 744$; total, $\$ 2,5$ T4.34. Receipts, $\$ 191.90$.

There have been performed many operations, all of which have been successful. The Sitka Hospital is widely known, and many natives come from long distances to receive treatment therein. Much good is accomplished by the religious instruction which is imparted along with the help given to the body. These two institutionsthe training school and the hospital-are doing much toward the regeneration, education, and eleration of the native Alaskans.

## IS IT WORTH WHILE?

The question, "Is it worth while?" constantly recurs. Was it worth while for the early Christians to attempt to reclaim the heathen world? Was it worth while for the missionaries a thousand years ago to brave dangers by sea and land in order to preach the gospel to our pacan ancestors? If the heathen world and our pagan ancestors could be elevated, cirilized, and christianized by the gospel, then the Alaskans can be. If we are Christians, it is "worth while" for us to be "about our Father's business" in this matter?

Our great danger lies in the fact that as Christians and missionaries we fail to appreciate the tremendous odds against which we must work, and the gigantic evils which are to be met in the attempt to save this people. Witchcraft, Shamanism, child murder, and putting to death of the aged and decrepit, and all the hoary superstitions and practices of paganism still prevalent, present an almost insuperable barrier. What is far more serious is the worse than heathenish practices of white men who are bent on gain, even though it be at the expense of death, physical and spiritual, to the natives. This class of white pagans too often get the ear of Christian tourists and poison their minds, who, returning to the States, retail these oft-repeated and as often exploded stories of "failure of missions in Alaska," greatly to the injury of the work. But it is God's work, and it will succeed.

FRIENDS' MISSION.

## J. H. Cammack, superintendent, reports:

Kotzebue. -The successful advance in all the departments of the mission's work has been very gratifying. The natives appear appreciative and receptive in both secular and religious training and instruction.
The attendance upon Bible schools, considering the sparse population of the region, seems almost phenomenal. With but three teachers, there was an average attendance in July, 1899 , of 6 per cent of the children of school age; in August, 17 per cent; in September, 70 per cent; in December, 82 per cent-averaging 68 for the whole
year, almost double that of the year preceding. There were 70 members enrolled on profession of faith, although it was but the third year of the mission's work there.
Twelve marriages were solemnized by Christian ceremony.
Christian burials were begun, and superstitions seemed to be breaking very remarkably.
A temperance organization was also organized by Mrs. Samms and 29 of the children. Nineteen of the young people and two old people pledged themselves to abstain from "tobacco, intoxicating liquor, and bad language."

Martha E. Hartley, teacher, conducted day and night schools most of the time during the nine months, having a total enrollment, first and last, of 98 names, the largest monthly average being in December, 1899, with 31 day and 8 night students. Their interest and progress was very gratifying. One wonders at what has been accomplished with so inadequate a house and other facilities. It has taken much labor of love, patience, and grace.

CONGREGATIONAL, MISSIONS IN AIASKA.

## [By the Rev. C. J. Ryder, corresponding secretary American Missionary Association.]

Cape Prince of Wales was first occupied by a missionary under the American Missionary Association eleven years ago. The record of the work during these years has been eventiful and somewhat tragic. The obstacles in the way of the work which developed in the early history of the mission, however, have been largely removed. During these latter years there have been cordial appreciation and response on the part of the natives to the efforts of the missionaries. Mr. and Mrs. W. T. Lopp have occupied the Central Mission at Cape Prince of Wales during most of this period.

Cape Prince of Wales, in its central station, has a school which enrolled 100 pupils last year. The home of the missionary and his wife is situated here, and its influence is felt in the lives of the people. Excursions are made by Mr. Lopp and Mrs. Lopp to the surrounding villages of the Eskimos, and the work of the mission is greatly reenforced. During the year a Siberian vessel brought the measles to the Cape, and the disease was epidemic for some months. Mr. Lopp wrote:
"All our children and the reindeer herders were taken down with it. We found it utterly impossible to make the natives take proper care of themselves. Most of the old people and many babes and little children died. There are only two grandfathers left in the settlement. For a while it kept us quite busy helping to bury the dead. We persuaded many to bury their dead under ground in the sand dunes of the cape. But some insisted on carrying their dead out to the hillsides or top, and covering with stones the rude box or coffin made of four hewn slabs, as they have been accustomed to for ages. A few days ago a woman who had buried her only child under ground had a dream that the spirit of her father, whose grave was on the mountain top, was lonesome without his grandchild; so she dug the child up, carried it to the top of the mountain and placed it beside its grandfather's grave. No doubt half of the people would have died of fright and neglect had we not been here to reassure them and help them. Down the coast about Port Clarence it is reported that when one would die those who were able to move would leave the corpse unburied and change their camping place. I will mail you some photographs taken on Kings Island. Our poor herders suffered for weeks. On account of the sick and weak condition of all the natives, we could get no permanent assistance from them. When a man herder had stood one day's watch he would become so weak he would quit herding and come into the settlement.
"All our own children except Dwight suffered from a severe attack of the measles. Our two youngest had bronchitis with the measles which kept-them very sick several weeks. Both of Sokweena's children died, and his wife, before she had regained her former health, was taken down a few weeks ago with pneumonia, and at this writing is still very sick. Although convalescent, she is very weak and seems to have some heart trouble. They are in a cabin near our house."
This extract from the missionary's letter indicates the difficulty and hardness of this service. The work which Mr. and Mrs. Lopp have accomplished during these years can hardly be overestimated.

Mitletok Mission is an outstation occupied in connection with the Central Mission at Cape Prince of Wales. Sokweena and his wife, two native Eskimos, have charge of this mission station. Here again, among the herders of the reindeer, there has been much sickness during the year. The food supply was short and the two native missionaries were obliged to remain for some time at the cape, where seal meat could be had. They returned to the outstation in March, and have carried on the work there under the supervision of the white missionary during the year. The condition and need of these people are presented impressively in the following from Mr. Lopp:
"The Eskimos generally have sufficient oil to put away in seal bags, which, with the occasional ptarmigan, seal, or frost fish caught through the ice, tide them over these starving times. It is anything but a pleasure to sled along this coast during one of these famine periods and stop over night in their in-eet (houses under ground). They watch every mouthful their white guest takes, and scramble on the floor for the smallest crumbs. As one's food supply is necessarily limited on sled trips, it becomes a question of suffering between one's stomach and feelings."

Mr. Lopp sends the following grateful recognition of the generous help rendered this mission by thoughtful friends at home and presents also special needs:
"Through the efforts of Miss Bertha M. Shepard, superintendent of the junior work of the W. H. M. S., of Massachusetts, Mrs. Butler and her juniors of Three Rivers have sent us a handsome contribution to assist with this work.
"I think we wrote you last winter about pneumonia and typhoid which Keok and Kivyearzruk had, and the scarlet fever we had in our family. Lucy has entirely recovered from the severe attack which she had.
"All this sickness has shown us more plainly than ever the need of a rude hospital here. The call for medicine and nursing is increasing every year, and too often it is utterly useless to help the natives who are sick when they live as they do. Sickness interfered with our day school last fall and winter. The Sunday services and Wednesday night prayer meetings were well attended. With the exception of March and April the hunting was fairly successful, but in those months there was considerable suffering for lack of food. About 300 walruses were killed here in May and June; no whales."

The Boys' Missionary Society of the Church of the Pilgrims, Brooklyn, has been accustomed to send a Christmas box for distribution by the missionaries at Cape Prince of Wales. This year Mr. Lopp started out before daylight on Christmas morning, and with the help of an assistant Santa Claus distributed these gifts among sixty-four households. It was a Christian merrymaking and kindness thoroughly appreciated by the Eskimos.

The Thornton shop has proved a useful building. The funds were largely secured by Mrs. Thornton, the widow of the first martyred missionary. It is a good building, 12 by 40 feet, made of single boards and partially banked with sand. During the sickness of one of the native missionaries, Kivyearzruk by name, a portion of this shop was used as a hospital. Sleds, canoes, ice drills, and other implements have been made in the shop. It has met a great want among the people and is of great value.

A herd of reindeer has been successfully cared for during the year. Two herders, trained to the care of these animals, were added to the list. "The Reindeer Express," consisting of reindeer and driven by a native herder, was tried between Nome and York during the winter. After making two trips it was abandoned on account of lack of traffic.

The following interesting and amusing portion of a letter recently received from Mr. Lopp well illustrates the condition of this field. The principle of Christian altruism seems already taking possession of the hearts of these needy people of our far western frontier:
"In one of your letters you spoke about the A. M. A. entering Porto Rico. We are going to help you. Our natives have considerable money now, but its purchasing power is not great in this region. So we are going to institute a collection box or 'pass around the hat' every Sunday this winter for the Porto Rican work. Thomas Illayok will be our treasurer and remit the money to the association. You will remember a few years ago we had Sunday collection, but the contents of the box became so dangerous and the collection so inconvenient to handle that we discontinued it. Then they contributed cartridges, lead, powder, caps, miners' matches, etc. We used that accumulation when we built the Mitletok Mission, paying the natives up there for work."
baptist mishions in alaska.

## [By the Rev. Curtis P. Coe, Superintendent, Wood Island, Alaska.]

When we returned to Alaska last spring we were most fortunate in securing Mrs. Campbell, of Oakland, to go with us, as matron. She has proved to be a woman true as steel, and has in every way verified the wisdom of our choice. The spring work was begun before we reached home, and through the summer continued much as usual; gardening, fishing, haying, filling the silo with grass, raising chickens, and caring for the stock occupied the time. The accident of the haying, whereby Conrad and Mike were drowned, fills us all with sorrow.

Schools.-In September the Government school opened, with Mr. Robert Slifer in charge. The enrollment has been larger than ever before. As the children must spend a portion of each day in work, I made arrangements with Mr. Slifer to conduct school four evenings a week, omitting Wednesday, the usual prayer-meeting evening. After Christmas the evening school was thrown open to all, and about 30 men and boys are enrolled. Our children are making creditable advancement in studies, and I note with pleasure their increasing desire to read books. I am planning to send some of the children to the Carlisle Indian School, if I can obtain permission and proper arrangements can be made.

Religious services.-Morning and evening prayer service in the schoolroom have been continued, and the usual Sunday and church service in the chapel. It has been my privilege to baptize two of the girls, Kate Sheperd and Mamie Kiehn. Pariscovia, Sallie, and Grace Hobbs have also been received for baptism. I believe the spiritual tone of the work is more manifest every year. Our church of $10 \mathrm{mem}-$ bers is alive to the interest of the denomination, and contributed in 1898 and 1899 $\$ 116$ to the missionary societies.

The children.-We were surprised upon our return to see how the children had grown; and the bills for living expenses are often so large as to take my breath away, for the children will eat, and they will eat so much. At present we have 29 in the home; one, Alexander, is in California with Mrs. Coe's parents. We could double the number in a short time, but lack of room and the depleted condition of the Alaskan treasury has compelled me to refuse to take more. From Unga and Prince William Sound have come appeals to which I have had to turn a deaf ear. If we do this work in the Lord's name we ought to be ready to undertake all He sends us. This is the only center of religious influence other than the Greek Church for thousands of miles, and we ought to give the benefit of the gospel to as many as are willing to receive it.

Building.-Ever since we came here it has been our opinion that we ought to have two buildings, one for the boys and one for the girls, if both were to be cared for. An appeal last year for such a building was unsuccessful. There was not much encouragement toward the thousand dollars necessary for a dormitory. Nevertheless we have not changed our opinion, and fully expect the time will come when our hopes will be realized. So imperative was the need that we gave to the boys our own cottage, and fitted up rooms for our own use in the Orphanage. This arrangement, while not satisfactory as a final settlement of the question, confirms us in the first opinion. When we built the cottage we felt it essential to the health and comfort of our own family, and time has not changed this thought. It would be a great satisfaction to us to return to it.

Sewing circle.-Early in the fall the ladies of the Mission family organized a sewing circle, to which all the native women on the island were invited. This has been well attended; nearly all have been provided with quiit patches, which they have about finished. Tea is served to all in the afternoon of the meeting. The American Tract Society kindly furnished some tracts in the Russian language, some of which have been distributed. At first one or two were reluctant to take them, but before they left they asked for one.

Our work.-The loom sent by friends in Atlantic City has been put to use; 30 yards of carpet has been woven. An expert might find fault with it, but we think it good for those who know nothing of the trade. The carpet lies on the front hall and stairs of the Orphanage, and looks well. Ten tons of ice have been stored for summer use; 35 tons of ensilage were placed in the silo, and 5 tons of good hay placed in the barn. The lamps from the young people of Charlestown were received safely and placed in the church.

The future.-A question that often confronts us when we think of the future of these children is, what will they be able to do to gain a livelihood? We should think earnestly of it. It will not do to take these children and teach them better ways of living, and then when they leave fail to see that they have an opportunity to live as we have taught them. In a developed country the need of help would be over when out of school, but here it is not so, for hunting is a thing of the past, and there are no fishing industries in this vicinity. I am now investigating the question of establishing a fishing station, and the present data seem to indicate it would be profitable. It may be that one of the commercial companies may begin the work; if not, then we ought to do something in the matter. It would take considerable money to start the plant, but not much for a permanent investment, and considerable for wages until we could receive returns for the first season's work. We could work the year round-in summer with salmon, and in winter with cod. Such a plant would give employment to natives as well as the boys.

Encouragements.-The work here is not one of unremitting trial and toil. There are many bright moments by the way; the love and regard of the children are large
compensations; so are our pleasant relations with the commercial companies and other white population, and the love and confidence of the natives. During the summer we had visits from the United States revenue cutter and the Harriman expedition. The famous steamship McCullough also came into the harbor. This month a party from Cape Nome, with Rev. L. L. Wirt, who has charge of the Congregational stations in Alaska, visited us. Mr. Wirt preached for us on Sunday morning.

Christmas.-Our Christmas festivities were second to none ever enjoyed here, although the boxes from New England so long on the way had not arrived. Christmas afternoon the steamer Golden Gate steamed into the harbor, and we learned that the long-delayed boxes were on board. The next day they were brought over to our island, and the opening of them forcibly reminded us of the interest, thoughtfumess, and love of our New England friends. The boxes exceeded any ever sent before in usefulness and value. The kindness of Kadiak friends I would specially mention. They made a large number of dolls for our tree, and sent fruit, ribbons, and candy to brighten our Christmas. To one and all, far and near, we return our thanks. There has been little sickness in the mission during the year, and we hope and pray that tre may be delivered from sickness now, for our physician, Dr. Ostrum, is to leave us, and is going to take charge of the hospital at Cape Nome, leaving us with no one competent to administer medicine. It is doubtful if we can secure a doctor unless one can be found for the school.

## [From the annual reports of the missionaries.]

Bethel.- The consecutive account of the mission work was broken off with the mission year ending June 1, 1899, and we will begin again with June 9, when Brother Helmich started for the coast for our supplies. The watch was long and wearisome. About the middle of July three of the sailors of the Bowhead, i. e., the boat to bring our supplies, came ashore below Quinhagamiut, having been left by their captain at Good News Bay, from which place they found their way to where the traders and mission party were in camp.
On the 15 th and 16th of August the missionaries and traders retired from the coast quite out of heart from their long stay at the coast and their shortage of supplies.
The mail for the mission fortunately came via St. Michael, reaching us on July 21.
The Brethren Romig and Weinlick went to the Yukon to try to secure supplies, since we could no longer depend upon our supply vessel. Their trip proved to be a hard one. But with the support of our people we were enabled to obtain enough to secure us against serious want. With what can be obtained by dog sled this winter it will suffice till the arrival of this year's supplies. Game is more plentiful than of recent years, and by care and management we have not felt the failure of our vessel so much as we feared we would.
The work of the mission has been very promising. The two upper villages, Akiagamiut and Akiatshagamiut, stand better than for some time past, there being a larger number of communicants there than at any previous date.

The work at Quinhagamiut has prospered beyond our expectation. We were greatly cheered when on December 31, 1899, twenty-seven were added to us by baptism and two by the right hand of fellowship. There are still ten applicants at the present date.
The next large village this side of Quinhagamiut, Apokagamiut, is asking for the stationing of a native helper and for regular attention. The village is large, numbering about two hundred souls. We hope to begin work here in the near future.
The standing of the work has never been more encouraging than at the present time. The old members remain faithful, and we are continually rejoiced over new additions and extended interest in the cause we are sent to proclaim. Although we have had our trials and discouragements, we also have had the assurance of God's blessing on us and the work. We are quite satisfied that they that be for us are more than they uat be against us.
The work of the native helpers has been such as to cause us much satisfaction and lead us to place important work in their hands. Were it not for their assistance we should be unable to meet the needs of the field.
The medical work has done its part, and forms a raluable adjunct to the ministerial labor.
The mission accounts and the financial report have been assigned to Brother Weinlick as steward. Brother Helmich will render the financial accounts of his district.
The arrival of a herd of reindeer may be expected during the fall of the present year.
Carmel.-Some persons speak about the natives as dying out. As we have completed the enumeration of the people in one-third of our census district we are in a
position to assert that such talk is not based upon facts. While there seems to be a slight falling off in the numbers of the natives at a distance, it is caused by their moving to the vicinity of the camneries, missions, etc. That the population has increased at these places we are sure. For instance, Carmel in 1890 numbered 189. To these figures should be added the village of Kanulik with 54; a total, therefore, of 243. This included whites and Chinese at the cannery during the summer. At present Carmel, including Kanulik, which is a part of Carmel, numbers 151 permanent residents. This census was taken from the 15th to the 17th of January, and is absolutely correct. To this should be added the whites and Chinese coming in summer, which will increase the population by at least 175 , making a total of 326 .

A still better result may be had by taking the number of dwelling houses and families. In 1890 there were 11 houses, as counted for tho census, while in 1900 there are 31, all the mission houses being counted as one. In 1890 there were 18 families, while now there are 34. Of these there are 8 whites, or white men married to native women, a greater number than at any other village of the river.

How did our membership compare then and now? Our numbers then were given as 18 , while now our members number 211.

MISSIONS GF THE PROTESTANT EPISCOPAL CHURCE IN ALASKA.
Alaska.-The following facts have been gathered from the letters of the Right Rev. Dr. Rowe since January 1, 1900, and from reports of missionaries in Alaska:

Sitko.-This little town is situated on Baranof Island. Its population is compozed of both whites and natives, the latter being in the majority. There are about 1,000 of them, while there are only a few hundred whites, composed of Government officials, Russians, merchants and tradespeople, a body of United States marines, and a floating population of miners and adventurers. Our own work in sitka is practically among the whites. The new church, St. Peter's by the Sea, has been completed. The land for the building was purchased through the efforts of the women in Sitka. The corner stone was laid June 29, 1899, and the first service was held on November 26 of that same year. The church is built of stone and wood and cost a little over $\$ 1,000$, the gift of a New York church woman, who visited Sitka some three years ago. It was consecrated by the bishop on Easter day. In addition to the work in St. Peter's, Sunday evening services are held regularly in the United States jail, an important and encouraging work. The reading room opened nearly two years ago is also doing a noble work in making provision for men who have no place to which to go for recreation but the saloons, of which there are over twelve in Sitka.

Skagway.-St. Saviour's Mission is now receiving the ministrations of the Rev. James G. Cameron, who has been recently appointed by the board to that position. Though there but six months, he has secured the confidence of the people and is doing excellent service. Mr. Cameron reports that during the summer services have been regularly maintained. There are forty families enrolled and about the same number of communicants. There has been an increase in the number of Sundayschool scholars. The Ladies' Guild has been very active in good works, having raised a fund of $\$ 210$ toward erecting a church building, the lot for which has already been secured at a cost of $\$ 500$. The sum of $\$ 1,000$ is needed for the church.

Juneau.-On the 17th of June the bishop officiated at Holy Trinity Church, Juneau, and confirmed a class of four persons. Church work has been continued at Douglas Island, the site of the famous Treadwell mine, where 1,000 miners are engaged. A lot has been secured for a church, and a fund is being raised for the erection of the building. At present the services are being held in a hall over a drug store, and are attended by a very encouraging congregation.

Cape Nome.-On the 15 th of last July the bishop visited Nome, traveling from Skagway via Dawson, the Yukon, and St. Michael. Upon his arrival at Nome he found awaiting him the Rev. Mr. Prevost, who had gone there under instructions of the bishop, making the journey overland from the Yukon. A few days later, on the 19th, they were joined by the Rev. Mr. Bloor, recently appointed through the board for that station. Here Mr. Prevost had established St. Mary's Mission. The services were first held in a large tent. The Bishop and Mr. Bloor have since built a chapel there with their own hands. On July 20 the holy communion was celebrated for the first time in Nome City. The bishop officiated and also preached at the 11 and 8 o'clock services, both of which were well attended. In the afternoon a meeting was held for the organization of a chapter of the brotherhood. Four men who were already members of chapters in various parts of the country and four new recruits formed the organization, and elected the Rev. J. L. Prevost delegate to the coming convention. A branch of the Woman's Auxiliary was also organized later on.

On the 2 th the bishop, after giving directions as to the future operations of the mission, took his departure for Point Hope, which he had not as yet visited, and where Dr. Driggs has for some years ministered alone to the spiritual and physical needs of the natives in that ice-clad region. Later he returned and proceeded to Tanana for the winter.

Rampart.-The Rev. J. L. Prevost, in charge of St. Andrew's Mission, reports that in consequence of the poor landing for steamboats at Fort Adams, and the removal of the trading station to a point 8 miles up the river, he suggested to Bishop Rowe the advisability of removing the mission at that place to Tanana, 10 miles distant. This was in the summer of 1896. Nothing could be done, however, that year. The next summer, 1897, the bishop, for good reasons, requested Mr. Prevost to take charge at Circle City. He arrived at Dall River September 25, on his boat, the Northern Light. One of the first remarks the natives made in the way of welcome was, "Thank you; God sent you here." Mr. Prevost set about at once to build a cabin to store away his gonds. In this cabin he taught the natives several hours each day. During his stay he baptized 39 persons and solemnized 13 marriages. On November 25, when the river was well frozen over, he resumed his journey to Circle City with three sleds and three boys. On the way he stopped at two Indian camps and baptized a few infants. At Fort Yukon he tarried a day with the Rev. Mr. Hawksley to talk over work and to recuperate the dog teams. Two days before reaching Circle City one of the boys was taken down with pneumonia. His riding the next day made the loads heavy. On the day following Mr. Prevost left the teams behind and pushed his way to Circle, a distance of 35 miles, which he made that night about 9 o'clock. He immediately sent reenforcements to the boys, and the next morning the sick boy, Paul, was brought up, taken to the mission house, and cared for by Miss Deane throughout his illness. During that winter Mr. Prevost had services twice every Sunday for the whites and once for the natives. The day school was taught by Miss Deane and Mr. Prevost. A building for hospital purposes was purchased for $\$ 1,100$. Mr. Prevost raised $\$ 457.71$ of the amount and advanced the balance himself, with the hope that he would receive it back again in "specials."

In 1898 he returned to Dall River to look after the boat and make some necessary repairs. A flood subsequently arising damaged his goods in the cabin to the extent of $\$ 200$. The rest of the spring he spent in teaching the Indians near the mouth of the Tanana. When the bishop arrived there, July 1, he presented a class of 16 for confirmation. During that summer the log ohut which had been used as a schoolhouse and some lumber and shingles were removed to the new site. On a subsequent visit to Circle City Mr. Prevost found that Miss Deane had started the hospital work and Dr. Watt-was in charge. A reading room was opened shortly afterwards, which proved a great blessing to the people as an offset to the saloons. A printing press was also added to the station. Religious services were carried on for both whites and natives, as in the year previous.
Hospitals.-Hospital work is carried on in four places: Skagway, Circle City, Rampart, and Nome. The fact that these hospitals have but few pay patients and many charity ones prevents them from being self-supporting. During the year Miss Hildur Lidstrom was appointed by the board as matron of the Bishop Rowe Hospital at Skagway, where she arrived on the 14th of May. The hospital at Circle City is under Dr. Watt, who has done effective service in ministering to the physical needs of the people in that section. The hospital at Rampart is under the charge of the Rev. Mr. Prevost, with the assistance of Mr. E. J. Knapp and Mr. Peters.
The Rev. Mr. Cameron reports that the hospital at Skagway has, through the generosity of a New York churchwoman, been provided with an operating room, a bath room, two rooms for private patients, the main room plastered, and certain other alterations made that greatly increased the facilities for work.

SCHOOL WORE OF THE RUSSIAN ORTHODOX CHURCH IN ALASKA.
[By Dean Antenius, Hiero-monk.]
Sitka.-This place is just at present in a fairly favorable condition for the advance of the orthodox school. With a population of less than a thousand souls, the town has six schools of different denominations and types. The success of any prosperous school is visibly tested by the number of the learners in it and the quality of the teachers. While tending toward a desirable standard in these respects, the condition of Sitka for the present year may be described as one of transition (mutatis mutandis) as regards programmes, branches of study, text-books, methods, number of pupils; some sides of the town's external life and environing social sphere have also been touched upon.

The Right Rev. Bishop's idea is to enlarge considerably the Innocentian Missionary School of Sitka. In its present condition it does not by any means cover the needs of the diocese or even of its own immediate district.

The health of the children in the Innocentian school is under regular medical supervision. They are experimentally trained in apiculture, an industry undoubtedly new in Alaska; indeed, probably a first attempt, but likely to be as successful there as anywhere in central Russia.

General hygiene is to be introduced, with rational preventive measures against the local danger from climatic influences, various inherited evil maladies, and alcoholism, which latter disease holds the lower classes at Sitka in a clutch-like, demoniacal possession.

Before the beginning of the school year which forms the subject of the present report, the Innocentian Missionary School was visited and blessed by the Right Rev. Tikhon, bishop of the Aleutian Islands and North America, who selected Sitka in preference to any locality as the place for an orthodox school with a thorough course of instruction and for the introduction of those improvements which he has planned to have carried out at once. Toward the end of the school year the general agent of public education visited the Russian mission at Sitka. All the projects for the better organization, spiritual and secular, of the orthodox schools in Alaska were welcomed by him with expressions of sincerest sympathy. Dr. Jackson requested that a historical sketch of the work and workers of the Orthodox Church in Alaska be prepared and sent him, to be included in his report for the current year-the first time that the school work of the Orthodox Church will take its place on the United States registers.
Juneau.-The parochial school has been getting on through the last school year very successfully. Without any particular disturbances or any gloomy symptoms in the environing conditions, apart from a slight complication caused by the serious illness of the teacher, who is also reader at the church, the school has advanced quietly toward its well-defined and conscientiously pursued aims. The success was according to the true deserts of teachers and learners.

The pupils of the Juneau school are particularly good at reading the church books, at singing from notes, at choir singing at the services, and conduct the services understandingly, with calm assurance and in perfect form. They write English remarkably well, and are also proficient in reading and arithmetic, and their progress in all branches is most satisfactory.

A novel and pleasing feature of the last school year was the interest shown in the school by the Koroshes, who are not as shy of books here as in their more unapproachable native wilds.

On the whole, judging by the earnest and sincere work done at this school, we feel loound to attest with respect and gratitude that those in charge of it have done well.

At the present moment two very important buildings are being finished at Juneau, both destined for schools-a city school and a Roman Catholic one. This somewbat belated effort to give a fresh impulse to education is evidently in accordance not so much with the actual rather depressed conditions of the place as with the earlier, when it had the ambition to become a little capital, the center of a permanent gold market. And the new schools are calculated with a view to such definite elements of their own that we positively hope for a peaceful state of general and equal satisfaction for all.
Killisnoo.-The incipient and somewhat irregular condition of the primary school here attracted the bishop's attention last year. In the present year it was given a new teacher, who should be able to get the children of the surrounding nomadic tribes settled down to their primers and to teach them something of reading, writing, figuring; to train them to say some prayers in their own dialect, and to sing some simple hymns. But these good intentions were not crowned with success. The Koloshes about Killisnoo are particularly slow, dull, of a sullen, materialistic bent of mind. They have not yet awakened to any consciousness of the good of learning, which, indeed, is hid from them by certain oppressively sordid features of local life. The last school year at Killisnoo numbered not more than fifty days. Such a brief term is utterly insufficient to secure anything like serious progress, or even to get a timid young savage at all familiar with his school, his book, and their uses.

Nor can there be much question of discipline. The Koloshes not being citizens by right, have so far no idea of any kind of civic or even social life, preferring to form a sort of abnormal ethnological wedge in the midst of the population of the United States.

Nutchek.-The parochial school here is in favorable conditions of time and place. Its peaceful days have been undisturbed by any hostile aggression or wrong from
without. Originally excellently well organized by the teacher, A. P. Kashevarof, the present managers continue in the same spirit, with satisfactory results. A pupil of the school, A. Bolshakof, graduated this year, already himself conducts the work of enlightenment at Tatitlak, near Virgin Bay, and the animated town of Valdes.

The support of the school and the home is assured by the generous donation of the honorary trustee, Timothy V. Yuritchin, to the amount of 250 rubles yearly. The study of the English language is compulsory.
The home is small, but so are the needs of the people, who are accustomed to provide and store only the most urgently necessary things for body and soul-as we are commanded.

Kenai.-The school work here progresses hand in hand with the affairs of the parish, which are conducted with firmness, zeal, and tact. The parochial school is flourishing and attractive both by its external appearance and its internal well-ordered organization. Upon it are centered the hopes of the community, which lives on in the calm induced by religion and kindly hearts, thoroughly comprehending the Socratic truth that education, in the words of Plato, is the best of the things which the best people can have.
It is a pleasure to mention in connection with this that the parish priest conducts the school with perfect comprehension of the true spirit of a missionary school. "A good priest is the soul of the school; and the school is a saving anchor to the priest," says S. A. Ratchinsky, that competent and experienced laborer in the field of church education.

The progress made by the children in the branches on the programme, including the English language, is mostsatisfactory. Church and school have worked together lovingly and cheerfully, not discouraged by inevitable difficulties. Their beneficent, self-denying zeal finds a response in Russia, whence a lady, O. P. Petrorskaya, sends a yearly contribution of 150 rubles.

Just at present the school's chief need is a fund of good books, to start a library for the children and the people. This is an important question and well worthy of favorable consideration. "Without books, the mind is like a bird with clipped wings." This aid is especially needed by graduates of the school, that they may not let those precious bonds be broken which unite them to their educational home, and may not be deprived of the high enjoyment derived from reading-that true "hygiene of the brain."

Kadiak.-The character of this school is in accord with that of the first historical Russian settlement in North America. The Russian spirit, breathing power and health, is orer all. The parochial educational work cares nothing for politics, does not proceed by leaps and starts, and never swerves from its historical field. An overwhelming majority of the local population holds fast to the Russian language and the orthodox faith.
The Kadiak parochial school, named for the first American orthodox bishop, Ioasaphus, and the home of the name of Germanus, are under the care of a trusteethe priest, F. Dashkevitch, who has engaged to pay to these two institutions a yearly stipend of 250 rubles.
Afognak.-This island is morally constituted exactly like Kadiak. Here also the Russian spirit prevails-of course, only in a national sense, with no suspicion of political feeling. The Russians here are most loyal American citizens. The possession of the precious light of spiritual truth, the treasured native language and nationality, only make the local civic type stronger, firmer, and morally finer.
The orthodox school stands very high, owing to the objects it pursues, and therefore demands skillful management. Not words alone, but deeds-a living example in life, faith, and charity-are required of the priest. Although his task is not particularly hard, owing to the local favorable conditions for the sowing of the religious and moral in the spirit of the orthodox church, still his labor, by the grace of God, will be counted to him as equally worthy of a great reward.
The above include the reports submitted to me by the various missionary organizations in Alaska.

Very respectfuliy yours,

## CHAPTER XXXIII.

## TENTH ANNUAL REPORT ON THE INTRODUCTION OF DOMESTIC REINDEER INTO ALASKA.

Department of the Interior, Bureau of Education, Alaska Division, Washington, D. C., December 31, 1900.

Srr: I have the honor to submit to you my Tenth Annual Report on the Introduction of Domestic Reindeer into Alaska. At the beginning of the year, learning that the revenue-cutter Bear, which has so largely in the past furnished the transportation of reindeer from Siberia to Alaska, would have less time than usual for this work during the coming season, owing to the additional work imposed upon it by the large influx of miners and others to Cape Nome, it was thought best to try to secure the charter of a steam schooner that could be employed during the whole season in procuring reindeer.
Correspondence was had with leading shipping firms in San Francisco and on Puget Sound. It was found that in anticipation of the unusually large business that would be transacted between Pacific coast ports and Alaska every available vessel had been chartered. Finding it impossible to secure the desired vessel on the Pacific coast, a conference was had with Commander Katsuro Narita, I. J. N., naval attaché Japanese legation at Washington, with reference to the possibility of securing a suitable vessel in Japan. Receiving encouragement from him, I applied through the Secretary of State to the consul-general at Yokohama, Japan, to ascertain if a suitable vessel could be obtained in that quarter, to which he cabled in reply: "Can not charter steamer Japan." Failing in securing an independent vessel, Captain Shoemaker, Chief of the Revenue-Cutter Service, with the approval of the Secretary of the Treasury, arranged for the cutter Bear to make one trip during the summer for reindeer.
Later in the season, when other plans had been formed and could not be conveniently changed, the consul-general in Japan secured the offer of a suitable vessel, but it came too late to be made available for the present season.
Subsequent events proved that perhaps it was providential we had failed to secure the proposed steamer, for upon reaching the coast of Siberia, where we had usually been able to purchase reindeer, we found the larger proportion of the population either sick or recovering from an epidemic of la grippe, measles, and pneumonia, which swept through that region during the past season. Although the cutter Bear cruised for several hundred miles along the coast of Siberia, calling at the various camps of the reindeer men, yet we were able to secure but 29 head of reindeer.
At nearly all of the herds many of the herders were sick, a number had died, and the people were in a discouraged and despondent condition, so that men could not be found to drive up and catch the deer and the owners were unwilling to sell.
This epidemic extended the whole length of the Aleutian Islands, along both the American and Asiatic shores of Bering Sea, to Cape Prince of Wales and into the Arctic, along the Siberian coast beyond Cape Serdze Kamen, and up the American side to Point Hope; also on the Lower Yukon River.

- The death rate was mainly confined to the aboriginal population, they being ignorant or unwilling to take proper care of themselves, and in some cases where the physician was in attendance they could not be made to follow his directions. The result was that hundreds died.

In the village at Indian Point, Siberia, it is estimated that one-half of the entire population died. This is also true of the Eskimos in the neighborhood of Teller Reindeer Station on the American side. Out of the population of 300 on St. Lawrence Island, 36 died within a month. Forty per cent of the natives at Nulato and Koserefsky, Yukon River, died during August. Parties of miners and prospectors traveling through the region would come upon deserted native huts or tents containing unburied dead bodies. In some cases they found young and helpless children whose parents had died, leaving them entirely without support.
In one case a young baby was found alive in a hut trying to draw nourishment from the breast of its dead mother. At Port Clarence a dying native, summoning up his remaining strength, seized his gun and shot dead the Indian doctor, who was himself sick and would probably have died in a day or two if he had not been shot. Distressed natives in the neighborhood of Nome were gathered into a camp outside of the military post where they could be attended by the military surgeon. At the Teller Reindeer Station and at the several mission stations in that region children whose parents had died were gathered into an orphanage established by the missionaries.

This epidemic proved so fatal as to cause a panic, and whenever a person died the friends fled from the house, leaving the remains unburied, or, if in the neighborhood of a station, to be cared for by the missionary. This epidemic occurred during the usual fishing season, when the natives are accustomed to dry their winter supply of fish; consequently very few fish were caught, and the opening winter has found them without a supply of food. To prevent the coming starvation as far as possible, General Randall, U. S. A., wrote to the Secretary of War; Captain Tuttle, RevenueCutter Service, to the Secretary of the Treasury, and Governor John Brady to the Secretary of the Interior, presenting the destitution among the natives and uniting in the request that Lieut. D. H. Jarvis, Revenue-Cutter Service, should be detailed and authorized to supply provisions, and use the revenue-cutter Bear to distribute them at central points as far as the Bear could reach them during the remaining portion of the season. Consequently small supplies of food have been left with the missionaries, Government teachers, and Government officials at such central points as they reside. These missionaries, teachers, and officials will act as local distributors under the direction of Lieutenant Jarvis. But notwithstanding the provision for winter, grave fears are entertained that there will be many natives so distant from these relief stations that they can not be helped and that there will be much suffering and death in consequence.

## PERSONNEL.

In the absence of Mr. William A. Kjellmann on account of sickness, Francis H. Gambell, M. D., was appointed superintendent of the reindeer stations, with permission to select his own assistant, which he did in the person of Mr. S. Newman Sherzer.

Mr. Sherzer served with acceptability from October, 1899, to March 1, 1900. On March 1 he was released from the duties at the station in order to take charge of carrying the United States mail with reindeer semimonthly between Eaton Station and Nome.

Mr. Ole Oleson Bahr, having commended himself to the management by his efficiency, was made foreman of the Laplanders at the salary of $\$ 25$ per month and rations.

On the 31st of January, 1900, at the close of the year for which they were engaged, the following herders and employees left the service at the Eaton Station:

Messrs. Per Larsen Anti, Per Andersen, Lars Larsen Anti, Mrs. Per Andersen, Nils Persen Bals, Aslak Johnsen Bals, Anders Johanessen Balto, Isak Andersen Bango, Anders Klemetsen Biti, Marit L. Biti, John Eriksen Eira, Marit Eira, Aslak Aslaksen Gaup, Johan Peter J. Nango, Per Joseisen Porsanger, Ole Johannessen Pulk, Johan Peter P. Rista, Nils Persen Sara, Isak Mikkelsen Tornensis, Anders Person Utzi. A number of them went into the mines at Nome, and others remained at the station waiting for an opportunity to return to Lapland in the fall.

Through the kindness of Gen. George M. Randall, U. S. A., commanding the Department of Alaska, and Mr. William S. Pinkston, quartermaster's agent in charge of the U. S. A. transport Lawton, such an opportunity was afforded on the 8th of August, when Captain Pinkston received on board of the Lawton, for transportation to Seattle, Aslak A. Gaup, wife, and infant; Johan Nango, wife, and two children; Aslak Bals, wife, and two children; John Eira and wife; Anders Biti, wife, and infant; Alfred Hermansen, wife, and infant; John Rista and wife; Lars Larsen Hatta, Per Porsanger, Anders Utzi, and Isak Tornensis.

Messrs. Johan Isaksen Tornensis, Per Mathisen Spein, Alfred Hermansen, and Ole Olesen Bahr were employed from February 1 to the close of the fiscal year, June 30, 1900. Mr. Jacob Larsen Hatta and family remained with the herd at Point Hope until fall, when he was returned on the revenue-cutter Bear to Nome.

Mr. Lars Larsen Hatta, who assisted Mr. Marshall in driving the herd from Point Barrow to the Teller Reindeer Station, finally reached the Eaton Reindeer Station March 4, 1900. His time having expired, he was discharged.

Mr. Lars Larsen Anti, who was attacked with rheumatism upon his first arrival in Alaska in the spring of 1898, died at Eaton Reindeer Station April 22, 1900.

For the fiscal year ending June 30, 1901, the list of employees is as follows:
Eaton Station.-Francis H. Gambell, M. D., superintendent; Messrs. Frederick Willard and J. T. Lindseth, assistants; Messrs. Ole Olesen Bahr and Per Mathisen Spein (Lapps) and 2 herders (Eskimos).

Teller Suation.-Rev. Tolef L. Brevig, manager, and Messrs. Johan Isaksen Tornensis and Per Larsen Anti, herders.

Gambell Station.-P. H. Lerrigo, M. D., manager, and Messrs. Nils Persen Sara and Ole Krogh, herders.
Bethel, or Nulato.-Messrs. Nils Persen Bals and Isak A. Bango, herders.
When, on July 1, it became necessary to reemploy those of the Lapps who were needed in connection with the herds, they demanded a large increase in their wages. Some of their companions, at the expiration of their service with the Government, had gone into the mines and made from $\$ 1,000$ to $\$ 100,000$. This had greatly excited all the Lapps, and to keep any with the herd I found it necessary to increase the wages to $\$ 500$ annually, with rations and clothing.

Of the 63 herders and their families, making an aggregate of 113 Norwegians, Finns, and Laplanders brought to the United States in 1898 in connection with the reindeer enterprise, 3 men have died; 12 men and their families, aggregating 24 people, have returned to Lapland, leaving 86 of the party still in this country. Of these 86 , from 17 to 20 have made fortunes in the gold mines since the expiration of their term of service with the Government.

> STATIONS.

Eaton.-The station buildings are in good condition. The fall was passed in freighting the supplies from the seacoast up the Unalaklik River 8 miles to the station. As the employees are frequently compelled to remain over night at the mouth of the river, a double $\log$ house was erected at the side of the warehouse for their accommodation. A log house was also erected at Cape Denbigh for the storing of supplies and the shelter of the herders at the summer pasturage.

The station being on the direct winter route between Dawson, the Yukon Valley, and Nome, the long winter was enlivened by many visitors. It is estimated that a thousand miners called, many of them remaining over night, and some of them receiving medical attention.

The station post-office was the distributing point for the mails going north to Kotzebue, south to St. Michael, west to Golofnin, Nome, Teller, and Cape Prince of Wales, and east to Yukon Valley, Dawson, and the States.

A large number of young reindeer were broken to harness; also a large number of sled deer were furnished the mail carriers. A quantity of timber was got out and prepared for hames. A number of pulkas (reindeer sleds) and sets of reindeer harness were made both for the use of the station and also for other stations where suitable lumber could not be obtained.

The school was taught by Mr. Sherzer, and was attended by both Lapp and Eskimo children. The children made marked progress in acquiring the English language.

The health of the employees was generally good. There were two cases of typhoid fever, both of which recovered. Mr. Lars Larsen Anti, who had been an invalid during hiṣ entire stay in Alaska, died on the 22d of April.

The large headquarters building at the station, removed to the mouth of the river, would make a suitable building for the accommodation of the large number of orphans that the recent epidemic has created in Alaska, if the Government shall undertake their care and education.

Teller.-This station remained closed for two seasons. The buildings have been greatly abused by transient white men who have occupied them during the winter, and in consequence are very much out of repair. As there was no fund from which a watchman could be hired, I tried the experiment of allowing a prospector the use of one of the buildings in 1898-89 in consideration of his caring for the property. Although he was well recommended as worthy of confidence, he abused his trust. During the winter of 1899-1900 Mr. C. E. Chard, recommended by a. responsible business firm in Seattle, was allowed the winter use of a building in consideration of looking after the others. He attempted to do his duty, but was overpowered by others, among them being a United States deputy marshal. The trespassers took charge of the main building, established a saloon kept by an Eskimo woman, wintered their dogs in one end of the building, and occupied the other portion themselves.

During the summer the Rer. T. L. Brevig and family, who had formerly been at the station, returned and took possession, greatly to the joy of the neighboring Eskimos. And his coming was opportune both for the people and the reindeer herds, as an epidemic of measles, la grippe, and pneumonia had just commenced, which in the next few weeks caused the death of one-half of the natives.

As soon as it was known that Mr. and Mrs. Brevig had returned, the natives that were in the vicinity removed to the station to receive medical aid and sympathy. Many parents died, leaving helpless and destitute young children. Mr. Brevig took the children into his own home, establishing an orphanage.

The prevailing sickness also fell heavily upon the Eskimo herders Tautook, Dunnook, and Sekeoglook, who lost their wives and some of their children. Wooksock, his wife, and all his children but one died, leaving a little boy the sole survivor of the family. Wooksock's reindeer herd will be cared for by the Government for his boy.

In this connection it is appropriate to call attention to the death of Tumasock, who died of consumption at the Indian school, Carlisle, Pa., on April 8. She was one of a band of young people taken from this station to Carlisle in the fall of 1897. She was greatly beloved by her associates and died rejoicing in Jesus.

HERDS.
Eaton Reindeer Station.-On July 1 the herd numbered 588 reindeer, 385 being old deer and 203 fawns. In the herd 423 belong to the Government, 80 to the St. James Episcopal Mission, 65 to Moses, 20 to Martin.

Those belonging to the St. James Mission consist of 25 males, 16 females, and 39 fawns. In the summer they are pastured at Cape Denbigh and in the winter at the station. At the neck of the peninsula of which Cape Denbigh is the southwestern extremity a fence $1 \frac{3}{4}$ miles long was thrown across from sea to sea, making an inclosure of the peninsula. This has greatly lessened the work of the herders. A house has also been erected for the use of the herders and the storage of provisions.

This section having proved so excellent for grazing during the last three seasons, an effort will be made to have it set apart by the Government for this purpose.

On the 5 th of November, 1899, 280 deer were taken from the herd to help pay for those that had been borrowed by the Government from Synrock and Cape Prince of Wales in the winter 1897-98. A number of sled deer were employed in carrying the mail between St. Michael, Eaton, Golofnin, Kotzebue, and Nulato.

The unusual demand for sled deer stimulated the work of breaking in and training new deer to harness. In the list of deaths but 2 reindeer are reported as dying of foot disease. The casualties from all causes numbered 35 .

Golofnin reports 244 old deer and 110 fawns in the herd. Of these 147 belong to the Swedish Mission and 179 to the Eskimo herders. Mr. Hendrickssen reports the herd as doing well.

On the 24th of November, 1899, Dr. Gambell, acting under instructions, took from Goloínin 90 bucks, 126 does, and 67 fawns, making 283 in all. Of these 98 belonged to the Government from the original loan, 80 to the Episcopal mission at the mouth of the Tanana, and 65 to Moses (native). The casualties during the year amounted to 16 , including 5 killed for food.

Owing to the number of saloons which have started up this summer at Golofnin, the Swedish Evangelical Union Mission, which has the deer in charge, propose moving their mission to a point 8 miles distant, behind Carolyn Island. A large number of natives died this season during the prevalence of the epidemic.

Teller Reindeer Station.-On December 9, 1899, Dr. Gambell, superintendent of reindeer, inspecting the herds at Port Clarence, found 23 deer which belonged to the Government, 21 of which were placed in charge of Dunnak and 2 in charge of Tautook.

In January, 1900, William Marshall, who was in charge of the herd of reindeer driven from Point Barrow, left with Tautook and Dunnak for the Government 260 head. No report has been received from the Eskimo herds belonging to Tautook, Seoglook, Wooksock, and Tat-pan.

Superintendent Gambell, in his tour of inspection December 9, 1899, writes of them: "It gave me more pleasure to witness the control of the herd at Port Clarence than any herd elsewhere. To know that these (Eskimo) people took as much pride in their herd and gave them as much attention as they did demonstrated to me the fact that they are a very competent people, and that your original idea and purpose is being realized. I trust that more may be placed in the hands of these suffering people soon."

The Rev. T. L. Brevig, who had been connected with the reindeer station for several years, returned in July, 1900, after a two years' sojourn in the States. His coming was most timely. An epidemic had broken out among the people, and in their distress they flocked to the station.

All the herders and their families were sick, and, unable longer to follow the herd, they had abandoned it, with the exception of Dunnak, who remained until too weak
to do more. As the herd was about to be scattered, Mr. Brevig arrived, accompanied by Johan I. Tornensis, an expert Lapp herder, who was at once sent out to the herd. The same disease that prostrated the herders, so that they could not keep as vigilant a watch as usual, also caused the death of many of their neighbors. Whole families died. This released from control many native dogs, which wandered through the country in search of something to eat and gave unusual trouble to the herd.

To add to the difficulties, the whole region around Port Clarence was overrun with prospectors, a few of whom manifested a disposition to interfere with the herds. To prevent this, Capt. Francis Tuttle, Revenue-Cutter Service, commanding the revenue cutter Bear, and himself a United States commissioner, officially called upon the United States deputy marshal resident at Bering City to use his official influence for the protection of the herds.

The Teller herds report more cases of foot rot than those at any other station, due doubtless to the fact that they were kept much of the summer on swampy ground.

With the presence of Mir. Brevig in charge of the herds we may expect a fuller report next year.

Cape Douglas.-In the summer of 1899 I had purchased in Kamchatka and delivered to Charley Antisarlook 42 head of reindeer; on December 1 Superintendent Gambell, under instructions, had added to Charley's herd 286 head, making the 328 head which the Government owed him for the herd borrowed in the winter of 1897-98 for the relief of the ice-imprisoned whalers at Point Barrow. In the spring 100 living fawns were added to the herd. Twenty-eight were sold, killed for food, or died, leaving, July 1, 400 head. During the past summer Charley and his two brothers (who were associated with him in the herding) died. The herd, by direction of Lieut. D. H. Jarvis, has been driven to the neighborhood of Cape Douglas, and Mary Antisarlook, the widow, will probably remove to the same locality.

Cape Prince of Wales.-On the 13th of December, 1899, Superintendent Gambell reached this station and turned over to Mr. Lopp, the missionary, 260 deer, completing the 749 deer that were due the mission and the Eskimo young men associated with him. These deer were in return for the 292 loaned the Government in the winter of 1897-98.

To the above were added last spring 237 living fawns, making a total of 986 , of which 415 are females. Of the 986,460 belong to the Eskimos. During the year 37 have died from disease and accident, and 30 males were butchered for meat.

There being an unusual number of prospectors in the country during the winter of 1899-1900, Mr. Lopp established a reindeer express between the mining camps at York and Nome. As far as the deer were concerned the line was a success; but there being an insufficient amount of patronage to make it profitable, the line was discontinued after two round trips.

This coming year Missionary Lopp is proposing to divide his herd, establishing a second in the vicinity of Shismaref Inlet, 60 miles north of Cape Prince of Wales.

Point Hope.-This herd belongs to Ahlook and Electoona (Eskimos), who had previously served five years' apprenticeship at Teller Reindeer Station. They were assisted last season by Jacob Larsen Hatta, an expert Lapp. This summer he resigned and left the station. No report has been received of the condition of the herd. The middle of December, 1899, Mr. William Marshall, in charge of the Point Barrow herd, left with them 5 males, 30 females, and 13 fawn deer.

Point Barrow.-On the 2 d of December, 1899, Mr. William Marshall, who had been selected to take charge of the reindeer to be driven from Point Barrow to the Teller Station, left with the Point Barrow mission herd 9 male, 62 female, 26 fawn, 1 steer, 3 sled deer, and 2 sick female reindeer; and with Chief Oyello 2 male, 16 female, and 7 fawn deer; making 128 in all.

During the spring 47 fawns were born at the mission, giving them 137 head. Twelve were born in Oyello's band, making his total 37 head.

During the winter the herd is kept at Sinragahroo, on the coast about 25 miles south of Cape Smyth, and in summer near Walakpat, 15 miles below the cape.
The following Eskimos are in charge of the herd: Should-la, Tok-put, Tsu-ka-wuna, Paueoneo, Powwna, Ungawishak, Otpello, and Ongakinya.

Gambell, St. Lawrence Island.-St. Lawrence, just south of Bering Straits, ${ }^{1}$ is the largest island in Bering Sea, being approximately 100 miles long and 25 miles wide. From the commencement the project of stocking this island with domestic reindeer has steadily been kept in view, but until this present season it has not been convenient to do so. On July 27 the revenue cutter Bear reached Gambell at 2.40 p.m., having on board 29 head of deer.
Reaching the village during the height of the epidemic, when every family was nursing its sick and mourning the dead ( 36 had died out of a population of 300 ), I found that the people had lost all heart; that although in previous years they had importuned for deer, now no apprentices could be found to go into the herd and assist the Lapps in herding. Under this state of things, conferring with Captain Tuttle, R. C. S., we concluded that the wisest course was to take the reindeer to Teller Station; but this decision was reconsidered the next day, when the progressive element of the population, who were absent from the village at the time, had returned. Learning that the deer were not to be left on the island, a public meeting was called, with the result that the next morning I was waited upon by a committee, who pleaded for the deer, promising to place their own sons with the herd as apprentices.
Consequently, on the afternoon of the 30th, the deer were landed in a bay on the east side of Northwest Cape, a few miles from the village. In September Captain Tuttle, R. C. S., upon his return from Point Barrow, called at Teller Station and took 45 deer from the Government herd, and after a stormy passage landed 42 on the island. Two were drowned in passing through the surf and one injured and killed en route, leaving a herd of 70 . Mr. Nils Persen Sara, an expert Lapp (with his wife and two children), and Mr. Ole Krogh were given the oversight of the herd under J. H. Lerrigo, M. D.

St. James Episcopal Mission, Weare, Alaska. No report has been received of this herd. It numbered 92 in 1899.

Hoof disease.-This disease has been less fatal than usual this year, prevailing mainly in the herd at Teller Station. Francis H. Gamble, M. D., has during the year made it a special study, and with the information gained has practically eliminated the disease from the herd at Eaton Station. The herds at Cape Prince of Wales and Point Barrow have had no trouble with it.

Dogs.-The large number of Eskimo families that have died during the prevalence of the epidemic have freed from all ownership and control a large number of dogs. This has been particularly the case in the neighborhood of Teller Station, where half the native population died, and the herders were so weakened that they could not properly watch the herd. The dogs, with no one to feed them, had to forage for themselves. Accustomed in former days to hunt the caribou, they naturally attacked the reindeer herd on every occasion, resulting in the shooting of many dogs.

Interference of white men.-The discovery of gold in the region of the reindeer herds has brought a large number of white men into the country. A large proportion of the newcomers have been intelligent, upright, and honorable men, who take an interest in the introduction of reindeer and are willing to give their influence to promote its success. But mingled with the better classes is a small number of the vicious, some of whom have openly boasted that they expected to live off the Government reindeer, and a few of whom have stolen and killed deer from the herd. A

[^96]party being caught in the act at Cape Denbigh, Superintendent Gambell went to Nome and swore out a warrant for their arrest. At last accounts they had not yet been found. If a few transgresssors could be punished for interfering with the reindeer it would probably save much future trouble.

In an act to define and punish crimes in the district of Alaska and to provide a code of criminal procedure for said district, approved March 3, 1899, the stealing of a reindeer is punishable by imprisonment in a penitentiary not less than one nor more than fifteen years (chap. 3, sec. 43). ${ }^{1}$ The driving of a reindeer away from its pasturage without the consent of the owner is punishable by a fine of not less than $\$ 50$ nor more than $\$ 400$, and renders offender also liable for damages to the owner (chap. 3 , sec. 44).

The killing, wounding, disfiguring, poisoning, or injuring a reindeer is punishable by imprisonment in the penitentiary not less than six months nor more than three years, or by imprisonment in the county jail not less than three months nor more than one year, or by a fine of not less than $\$ 50$ nor more than $\$ 1,000$ (chap. 3, sec. 55 ).

Moss burning.-During the last two summers, and especially during that of 1900, large areas of country have been set on fire by prospectors and miners. In some cases fires have been started from camp fires left burning when the campers have proceeded on their journey. In other cases fires have been started to clear mining claims of the suriace moss, and allowed to spread indefinitely. In still others the country has been fired for the mere excitement of seeing it burn. But from whatever cause, thousands of acres of good reindeer pasturage have been ruined and made unproductive. When reindeer moss (Cladonia rangiferina) is once destroyed, it takes many years to grow again. The Alaska Criminal Code, chapter 3, section 61, makes the starting of prairie fires an offense punishable by imprisonment of from three months to one year, or by a fine of from $\$ 50$ to $\$ 500 .{ }^{2}$

[^97]CHAP. 3, SEC. 43. That if any person shall commit the crime of larceny by stcaling any horse, gelding, mare, colt, mule, ass, jenny, bull, steer, cow, calf, reindeer, such person, upon conviction thereof, shall be punished by imprisonment in the penitentiary not less than one nor more than fifteen years.

Chap. 3, SEC. 44. That any person, not the owner or owners, who shall knowingly take or drive, without the consent of the owner or owners, or cause to be taken or driven, or shall assist in driving or taking away from the range or place where the same may be lawfully grazing, pasturing, or ranging, any horse, colt, mare, foal, mule, ass, jenny, or bull, cow, heifer, steer, calf, reindeer, sheep, hog, or any other description of domestic animal or animals from where the same may be lawfully grazing or in the habit of ranging, or where the same may have bcen herded or placed by the owner or owners thereof, for a distance of more than ten miles from such place where the same may have been so located or placed by the owner or owners thereof, or where the same may be in the habit of grazing or ranging, shall be fined in a sum not less than fifty doliars nor more than four hundred dollars, and shall be liable to the owner or owners of such animal or animals for all damages sustained by reason of such driving or taking away such domestic animal.

Chap. 3, SEC. 55. That if any person shall maliciously or wantonly kill, wound, disfigure, or injure any animal the property of another, or shall willfully administer any poison to any such animal, or shall maliciously expose any poison with the intent that the same shall be taken by any such animal, or shall maliciously or wantonly, in any manner or by any means not otherwise particularly specified in this chapter, destroy or injure any personal property of another, such person, upon conviction thercof, shall be punished by imprisonment in the penitentiary not less than six months nor more than three years, or by imprisonment in the county jail not less than three months nor more than one year, or by fine not less than fifty nor more than one thousand dollars.
${ }^{2}$ AN ACT to define and punish crimes in the district of Alaska and to provide a code of criminal procedure for said district. (Approved March 3, 1899.)
Chap. 3, Sec.61. That if any person shall maliciously or wantonly sct on fire any prairie or other grounds other than his own or those of which he is in the lawful possession, or shall willfully or negligently permit or suffer the fire to pass from his own grounds or premises, to the injury of another, such person, upon conviction thereof, shall be punished by imprisonment in the county jail not less than three months nor more than one year, or by fine not less than fifty nor more than five hundred dollars.

Superintendent Gambell, taking 260 reindeer from the Eaton herd and 283 from the Golofnin herd, on December 1, 1899, gave to Charley Antisarlook 286 head, and on the 13th of December gave to Missionary Lopp 257 head.

Starting from the Eaton Station on the 5th of November, Per Mathisen Spein was placed in the lead with his driving deer, while the bell deer was fastened to his sled behind, to act as leader of the herd. Nils Klemetsen and Per Porsanger brought up the rear with their sleds loaded with provisions, tent, stove, etc. Upon reaching Norton Sound it was found that the ice was not sufficiently strong for crossing. This necessitated a long detour around the head of the bay. Thanksgiving Day was spent at Nome, as also was Christmas upon the return trip. At Christmas some sled deer were harnessed up and attached to their sleds, and took part in the Christmas festivities for the children. Eaton Station was reached upon the return on the 4th of January. The expedition lasted two months, and the distance traversed was about 720 miles.

It having been decided to return to Teller Reindeer Station a portion of the herd that had been left at Point Barrow in 1898, the transfer was placed in the charge of Mr. William Marshall. He was assisted by Lars Larsen Hatta and Michel Bango, Lapps; also by Atpully and Wenyik, his wife; Onakinya and a Point Hope boy, Kayuga, Eskimos. At Point Hope the Lapp Bango refused to go farther, and his place was taken by Elektoona, an Eskimo, who had learned herding at the Teller Station.

Great difficulty was experienced in securing a sufficient number of sleds and fur clothing for the journey. When the time came for separating the portion of the herd to be left at Point Barrow from the portion that was to be driven south, the question arose of how to build a corral in which to separate the herd, there being no lumber or trees in the vicinity. They finally hit upon the unique experiment of building walls of ice. Slabs of ice 6 feet long, 3 feet wide, and 1 foot thick were sawn out. These were placed on end as close together as possible in a crescent shape and water thrown against the bottom of the slabs, which immediately froze and cemented the slabs to the ground.

On the 2 d of December 320 deer were separated from the herd in the corral and driven 5 or 6 miles down the coast. The 125 remaining in the corral were then turned loose and driven northward to remain at the station. In the herd to be driven to the south were 83 fawns, which, becoming tired of the long journeys, greatly hindered the progress of the herd. As there were but 6 deer broken to sled work in the whole herd, and no time for breaking steers, the sled deer were overworked, which also delayed the journey. The next day during a blizzard their tent was all blown to pieces.

From the 9 th to the 13 th of November blizzards were encountered, which drove them into a neighboring fishing village, without tent or provisions. The natives up and down the coast along the route taken by the reindeer were greatly interested in the herd, and many of them would follow from one village to another. On the way south 48 deer were left with Elektoona and Ahlook at Point Hope. During the trip 5 deer were killed for food, and two others died from accidents. Reaching Teller Reindeer Station January 20, 1900, 260 head of deer were given into the care of Dunnak for the Government.

Being without funds or barter goods, a number of bills were incurred while en route, to meet which I sent up barter goods on the cutter Bear, which were given out under the direction of Captain Tuttle, Revenue-Cutter Service, commanding.

St. Lawrence Island.-The purpose which has been had in mind for several years of stocking St. Lawrence Island with reindeer was realized this last summer by
landing on the island 70 head of reindeer, with Nils Persen and Ole Krogh, expert herders, assisted by apprentices, in charge.

Teller Reindeer Station.-Of the 260 reindeer brought from Point Barrow by Mr. Marshall, 100 head were loaned to the mission of the Norwegian Evangelical Lutheran Church at that station.

Nulato, Iukon River.-The plans that had been formed for loaning a herd of deer to the Roman Catholics during the winter of 1899-1300, owing to a combination of circumstances, failed of realization. Another effort will be made during the winter of 1900-1901.

Bethel, Kuskokwim River.-Word was sent to Dr. J. H. Romig, superintendent of Moravian missions in Alaska, that a herd of reindeer would be loaned their mission from the Eaton Station during the winter of 1900-1901. During August, selecting some suitable native men, Dr. Romig started overland for Eaton. On his journey his native assistants were taken sick with the prevailing epidemic and returned home. It is expected that another effort will be made during the winter to secure their herd.

Purchase of reindeer in Siberia.-On the 19th of July, the cutter Bear having completed the taking of the census on Krusenstern Island, was headed for Asia after reindeer. At 7.40 p. m., anchoring off East Cape, Siberia, communication was had with the shore. Failing to secure an interpreter at this point, at $10 \mathrm{p} . \mathrm{m}$. we were again under way, picking our way through the ice floes. At $12.25 \mathrm{a} . \mathrm{m}$. on the 20th we anchored off Whalen, where during the morning an interpreter was secured. Again getting under way, the Bear stood to the northwest along the Arctic coast of Siberia, calling during the afternoon at Inchowan, where a native was landed with instructions to have reindeer ready for the return of the Bear. At 7.55 in the evening the Bear made a stop at Tschutpan, where communication was also had with the deer men.

Again getting under way at $8.10 \mathrm{p} . \mathrm{m}$., and working along shore through drift ice, at midnight we stopped and communicated with a small settlement of deer men. At $3.15 \mathrm{a} . \mathrm{m}$. on the 21st we anchored off Anurareem, again communicating with shore. At all these stations we found an epidemic of la grippe, and measles was raging. So many deer men were sick or had died that there were not a sufficient number of well men left to drive up the herds and catch deer for the ship.

Leaving Anurareem, open water was seen farther ahead, and the ship was worked through the ice until it reached an open lead. That afternoon we secured our first deer, 4 being obtained and brought on board; also some moss. Rounding Cape Serdze-Kamen, Siberia, at $10.45 \mathrm{p} . \mathrm{m}$. , we anchored off another village. Here we had better success, and during the day secured and brought on board 25 head of deer. Getting under way at $8.35 \mathrm{p} . \mathrm{m}$., various villages were visited between Cape Serdze and Koliuchin Bay, but, owing to the prevailing sickness, without any success.

Deeming that it was useless to proceed farther along the Siberian coast, the ship was headed to the southeast on its return trip down the coast, calling at several villages that had been visited on the uptrip a few days before, but, so far as securing deer was concerned, without success. On the 24 th of July a visit was made to St. Lawrence Bay, where the previous years we had been able to secure a number of deer, but this season none were to be had. Continuing south to Indian Point, on the 26th, and to Butankof Bay, Siberia, on the 27 th, and failing to hear anything encouraging, we concluded to give up any further attempt this season to procure reindeer in Siberia, and steaming over to Gambell, St. Lawrence Island, the 29 head of deer that had been obtained were landed.

# Number, distribution, and ownership of domestic reindeer in Alaska, 1900. 

Point Barrow:
Presbyterian Mission ..... 100
Ojello (Eskimo) ..... 37
Point Hope:
Electoona (Eskimo) ..... 50
Ahlook ..... 50
137
Cape Prince of Wales:
American Missionary Association ..... 526
Eskimos ..... 460
100
Teller Reindeer Station:
Government ..... 221
Norwegian Evangelical Lutheran Mission ..... 100
Tautook ..... 75
Sekeoglook ..... 75
Tatpan ..... 64
Dunnak ..... 50
Estate of Wocksock ..... 75680
Cape Douglas:
Mary Antisarlook ..... 400
Gambell, St. Lawrence Island:
Presbyterian Mission ..... 70
Golofnin Bay:
Swedish Evangelical Mission ..... 147
Episcopal Mission ..... 69
Okitkon ..... 49
Constantine ..... 12
Toptok ..... 13290
Eaton Reindeer Station:
Government ..... 423
Episcopal Mission ..... 80
Moses (Yukon native) ..... 65
Martin Jacobsen (Eskimo) ..... 20
St. James Mission (Episcopal) ..... 92533
Total ..... 3,323

Of the total of $3,323,6 \frac{14}{4}$ are still in the possession of the Government, 1,184 belong to the 6 mission stations, and 1,495 to 20 Eskimo apprentices. From 1892 to 1900, 997 reindeer were purchased in Siberia, and from these 3,342 fawns have been born in Alaska.

In addition to the annual increase in numbers, it may be said that the fawns born in Alaska greatly excel in quality those born either in Lapland or Siberia. The reindeer born in Alaska are developing into larger and stronger animals than the Siberian deer, from which they came.

Increase from 1892 to 1900.

|  | 1892. | 1893. | 1894. | 1895. | 1896. | 1897. | 1898. | 1899. | 1900. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total from previous year. |  | 143 | 323 | 492 | 743 | 1,000 | 1,132 | 1,877 | 2, 538 |
| Fawns surviving |  | 79 | 145 | 276 | 357 | 466 | 625 | 638 | 756 |
| Purchased during summer. | 171 | 124 | 120 | 123 |  |  | 161 | 322 | 29 |
|  |  |  |  |  |  |  |  |  |  |
| Total October 1. |  | 346 | 588 | 891 | 1,100 | 1,466 | 2,062 | 2, 837 | 3,323 |
| Loss. | 28 | 23 | 96 | 148 | 100 | a 334 | 185 | 299 |  |
| Carried forward. | 143 | 323 | 492 | 743 | 1,000 | 1,132 | 1,877 | 2,538 |  |

$a$ One hundred and eighty deer killed at Point Barrow for food, 66 lost or killed en route.
Expenditure of reindeer fund, 1899-1900.

| Amount a | \$25, 000.00 |
| :---: | :---: |
| Supplies for stations | 7,019.56 |
| Salaries of employees. | 5, 778.71 |
| Cash expended in purchase of deer. | 3, 795. 00 |
| Barter goods for purchase of deer. | 2, 341.72 |
| Freight. | 395.00 |
| Photographs for use in illustrating r | 2.55 |
| Balance | 5, 667.46 |
|  | 25,000.00 |

Congressional appropriations for the introduction into Alaska of domestic reindeer from Siberia:


REINDEER MAIL SERVICE.
During the summer of 1899 the Second Assistant Postmaster-General gave to Mr. William A. Kjellmann, superintendent of reindeer in Alaska, as subcontractor, the carrying of the mail on route 78110. This route called for three round trips during the winter of 1899 and 1900 between St. Michael, Eaton, Golofnin, and Kotzebue, the latter place being north of the Arctic Circle. Mr. Kjellmann, being required to return to the States on account of sickness, gave the work into the hands of Mr. David Johnsen Ellioit. Mr. Elliott employed Johan Peter Johannesen, a Lapp, as mail carrier. The service was successfully performed with reindeer, each round trip being 1,240 miles through a wilderness without a road.

Early in the year the Post-Office Department concluded to give Nome a semimonthly service, and the contract was given Mr. William A. Kjellmann. Mr. Kjellmann being sick and in the States, instructions were sent to Dr. F. H. Gambell to take charge and see that the mail was sent through without delay. These instructions reached Eaton in February, 1900, and on the 1st of March the reindeer started from Eaton with the mail for Nome. Mr. S. Newman Sherzer was released from his duties as assistant superintendent at the station and appointed manager of the reindeer mail service to Nome. Five consecutive successful trips were made, four of them with reindeer and sleds. The five trips completed the winter contract. The round trips, a distance of 480 miles through a country without a road or trail, were made as
follows: First trip, fourteen days; second trip, thirteen days; third trip, eleven and one-half days; fourth trip, eleven and one-half days, and fifth trip, fifteen days. The actual traveling time was from one to two days less than the foregoing figures, as a rest of twenty-four to thirty hours was taken at Nome and a shorter rest at Golofnin each way.

As the instructions for carrying the mail came suddenly and unexpectedly, there was no opportunity for preparing the route for relays of reindeer, but the same deer made the round trip.

On the second trip the reindeer passed dog teams and a bicycle that had passed Eaton two days before the deer started; reached Nome, rested thirty hours, and started on the return trip before the dog teams arrived. The regularity with which the reindeer landed the mail on time at Nome last spring won the animal many friends.

At the request of Mr. N. V. Hendricks, subcontractor, on the route between Weare via Eaton to St. Michael, Superintendent Gambell furnished his mail carriers with reindeer, pack saddles, and sleds between St. Michael, Eaton, and Nulato, a distance of from 180 to 200 miles each way.

The above routes aggregated last winter between six and seven thousand miles that were successfully covered by the reindeer. The superintendent, in closing this part of his report, says: "Our success in carrying the mail was due to three conditions: First, the capability of the deer; second, the close attention given to the work by Mr. Sherzer; and, third, the expertness of the driver, Nils Klemetsen.'

During the latter part of February and the first part of March some freight was hauled by the reindeer from St. Michael to Norton Bay for G. L. Stanley \& Co.
A contract has been made with Superintendent Gambell for carrying the mail with reindeer during the winter of 1900-1901 between Eaton and Kotzebue, a distance of approximately 250 miles. The contract calls for two round trips during the winter.

## CANADIAN INTEREST.

A lawyer in Canada, who has followed the reindeer enterprise from its inception with much interest, under date of May 25, 1900, writes to the honorable the Secretary of the Interior:

Your work in Alaska, through Dr. Jackson, appears to be ideal in every respect. At three different points I have written Canadians to look carefully into his work, and find that it is as highly prized in the mining camps as among scientists.

Our coast line from 142 degrees to the mouth of the Nelson, some 3,000 miles, is without a single school, and I hope to do something for the poor Eskimos through schools and the reindeer.

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INTRODUCTION OF REINDEER INTO THE "BLACK FOREST," GERMANY.
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The following item, clipped from the public press, foreshadows an experiment in a new direction:

An interesting experiment in acclimatization is now being made by Herr Wendt, chief forester at Todtnau, Germany. At the zoological garden at Basel he procured a male reindeer and completed the family by buying at the Copenhagen market two females. The three animals were let loose in the Fahlberg region of the Schwarzwald, which reaches an altitude of 4,500 feet. As there is a large supply of reindeer moss in the higher regions of the Black Forest, above the altitude of 2,400 feet, the chief forester believes that reindeer will thrive on the Fahlberg as well as on the Kjolen of Norway. Zoologists are watching this experiment with much interest.

## TELEGRAPH SERVICE.

Maj. Francis Greene, U. S. A., with a party of assistants, has commenced the constrution of a military telegraph line from Nome and St. Michael, via Eaton and Nulato, to Eagle City, in the Upper Yukon Valley. At Eagle the line will connect with another to Valdez, on Prince William Sound, and also with a line via Dawson
to Skagway. Between Nome and St. Michael a cable has been laid and is in successful operation. Telegraphic communication with the reindeer stations will be of much assistance in regulating the work.

## REVENUE-CUTTER SERVICE.

As in former years, I have received the hearty cooperation of Capt. Charles F. Shoemaker, chief of division of Revenue-Cutter Service, Treasury Department. Every request for assistance, as far as possible, was granted. I desire, also, to acknowledge the assistance of Capt. Francis Tuttle, commander; Lieut. E. P. Bertholf, executive officer, and the other officers of the revenue cutter Bear.
Thanks are also due Gen. George M. Randall, U. S. A., commanding the Department of Alaska, and Capt. William M. Pinkston, quartermaster's agent, in command of the army transport Lawton, for transportation from Nome to Seattle, both for myself and a party of 25 Lapps.

The graphic illustrations of the report are from photographs taken by Surgeons Call and Hawley, Chief Engineer H. W. Spear, and First Assistant Engineer H. N. Wood and Second Assistant Engineer A. C. Norman, of the Revenue-Cutter Service.
A number of photographs of Kamchatka that were received too late for last year's report are inserted in the present one.

## ITINERARY.

Leaving Washington on the morning of April 23, the following day found me at Chicago. At Chicago an interview was had with Dr. Eugene S. Willard, whose son had recently been appointed to a position at the Eaton Reindeer Station. Business was also transacted at the office of the North American Trading and Transportation Company concerning supplies to Alaska reindeer stations.
Leaving Chicago in the evening, Seattle, Wash., was reached on the morning of the 29th. At this point I was met by Mr. Fredrick Willard and Mr. J. T. Lindseth, who were under appointment and en route to the Eaton Reindeer Station. I also met the Rev. T. L. Brevig with his family, under appointment as Lutheran missionary at the Teller Reindeer Station. Mr. Brevig was made manager of the reindeer herds at Teller and teacher of the Government school.
On April 30 Mr. Ole Krogh, who had formerly been connected with the Eaton Reindeer Station, was employed to take charge of the reindeer that would during the summer be placed on St. Lawrence Island, Bering Sea. From April 30 to May 5 was a busy time arranging supplies for the various Alaska stations, the transportation of employees, and many other things demanded in providing for stations that were able to receive their supplies but once a year.
On the evening of May 5 I transferred my quarters from the hotel to the cabin of the revenue cutter Bear, Capt. Francis Tuttle, commanding. The roster of the Bear was as follows: Capt. Francis Tuttle, commanding; First Lieut. Ellsworth P. Bertholf, executive officer; Second Lieut. Claude S. Cochran, Second Lieut. Aaron L. Gamble, Third Lieut. Philip H. Scott, Chief Engineer Herbert W. Spear, Second Assistant Engineer Albert C. Norman, Second Assistant Engineer Theo. G. Lewton, Surgeon Hawley, M. D., Pilot J. W. Keene.
The following passengers were also received on board by permission of the Secretary of the Treasury: Lieut. D. H. Jarvis, Messrs. W. W. and Ezra Parker, E. E. Ailes, H. R. Cowan, W. E. Hadley, D. H. Smith, Fred Zollander, J. F. Hawkins, W. E. Clarke, E. B. Leddy, and Charles Howard.
The steamer got under way at $1.50 \mathrm{p} . \mathrm{m}$. Sunday, May 6, and ran down to Port Townsend, where we anchored at $6 \mathrm{p} . \mathrm{m}$. At 4.30 p . m. on the 7 th we were again under way, anchoring off Victoria, British Columbia, at 9.25 p. m. Leaving Victoria at 1.15 on the 8 th, we reached Union Bay at $7.20 \mathrm{a} . \mathrm{m}$. on the 9 th, where the ship made fast to the wharf to take on its supply of coal.

During the coaling, trips were made by the officers and their guests to the Canadian Indian reservation at Comox and other neighboring villages. Having received on board 550 tons of coal and 3,000 gallons of fresh water, at $8 \mathrm{p} . \mathrm{m}$. on the 10 th the ship cast off from the wharf, and, steaming down Baynes Sound and rounding Yellow Island light, went through Hornley Island Passage to the north. At $1.55 \mathrm{p} . \mathrm{m}$. on the 11th the ship ran in and anchored at Alert Bay, when an opportunity was given those who desired it to go ashore. The Indian village is the site of a cannery and also a mission of the Church of England. The Rev. A. J. Hall, who has for many years been in charge of this station, was absent on a visit to England, his assistant, Mr. A. W. Corker, and wife being in charge of the school during his absence. Mr. Hall has translated and secured the publication of the books of Matthew ${ }_{8}$. Luke, and John, a book of common prayer, and a hymn book in the Qa Gūtl language, the same being published in London. I visited the schoolroom, the dormitories and workshops of the boys' home, and the home of the girls in a separatebuilding.
In connection with the mission is a flourishing sawmill, which not only gives employment to the natives, but furnishes them with lumber at a moderate price for improved houses. Some of the parties secured photographs of the strange and uncouth totems, of which there were a number in the heathen portion of the nativevillage. At $3.45 \mathrm{p} . \mathrm{m}$. we were again under way. Our next call was on Sunday morning at Bella Bella, British Columbia, where the captain gave us an hour for the purpose of visiting the mission of the Canadian Methodist Church.
R. Large, M. D., and wife were off attending conference, leaving the station im charge of Miss Beatty. The mission is in the process of being transferred to a better location 2 miles north, where they will have more room for growing and also for gardens. Twenty-five new houses have already been erected on the new village site. The mission reports 88 members.

The attendance at the day school is quite irregular, as at most other native schools, where it is the habit of the parents to take their children with them when they gooff hunting or fishing. At 7.45 we were again under way. On the night of the 13 th, encountering a severe storm, the ship ran into Red Bay, and at 10.05 anchored for the night. At $2 \mathrm{a} . \mathrm{m}$. on the 14 th we were again under way, and at $2.30 \mathrm{p} . \mathrm{m}$. sighted Cape Edgecumbe and soon after sighted the entrance to Sitka Sound.

At $4 \mathrm{p} . \mathrm{m}$. we steamed by Biorka Island and at 6:10 p. m. anchored at Sitka, in front of the Presbyterian mission. The next three days were spent in inspecting the two Government schools and also the large industrial school connected with the Presbyterian mission. A conference on school matters was had with Father Anthony, of the Russo-Greek Church, who has recently been appointed on the school committee at Sitka, and is one of the foremost priests of that church in Alaska. He has written a monograph on the schools of the church in Alaska. Public school No. 1 and the industrial school showed a gratifying progress, while public school No. 2 (native) has an efficient and skilled teacher, yet the irregular attendance greatly interferes with the progress that the pupils should make.

AtSitka three Eskimo women and one boy who had been brought to Sitka the preceding fall as witnesses in a murder case, and who at the close of the trial wereunable to return to their homes, were now taken on board the Bear for their return. Col. L. P. Wright and W. L. McBride, deputy collectors of customs, were received on board on the 17 th , and at $4.30 \mathrm{p} . \mathrm{m}$. we got under way, passing out to sea by ways of Cape Edgecumbe at $7.30 \mathrm{p} . \mathrm{m}$. At $6.20 \mathrm{p} . \mathrm{m}$. on the 20th of May we raised Trinity Island in the north, and at 2.15 the next morning passed south of Chirikof Island, a former Russian penal colony, and on the morning of May 22 entered Delarof Harbor, anchoring at Unga at $5.40 \mathrm{a} . \mathrm{m}$. Going ashore, the school bell summoned the children to the schoolhouse, where a number of classes were heard. The recitations substantiated what we had already heard from the parents, that Mr.
F. A. Golder was an excellent and painstaking teacher. The schoolhouse at this point needed repairs, which were ordered. At 10.40 a . m. we were again under way, reaching Unimak Pass at $6.30 \mathrm{a} . \mathrm{m}$. on the 23 d .

Steaming through the pass into Bering Sea, and skirting the north shores of Akun and Akutan islands, their mountain tops covered with snow, we reached Dutch Harbor in the midst of snow squalls at $3.15 \mathrm{p} . \mathrm{m}$. During the week that was spent in securing coal and water for the ship and the boarding and inspection of the various vessels by the officers of the Bear, I was busy in going over the accounts of the builder of the new school building at Unalaska, and arranging for a greatly enlarged attendance at the school, the authorities of the Russian-Greek Church having decided to send their pupils to the public schools half a day in order that the children might have an opportunity of learning the English language. The Jessie Lee Home, which is a boarding school and orphanage at Unalaska, established and maintained by the women of the Home Nission Society of the Methodist Episcopal Church of the United States, I found to be in its usual flourishing condition. Dr. and Mrs. A. W. Newhall and Miss Ella Darling are in charge.

During our stay at Dutch Harbor and Unalaska 20 vessels arrived loaded with passengers and freight for the mines at Nome City. The ship having watered and coaled, Messrs. J. C. Shaw, J. E. Haehin, and H. Johnston were received on board for passage to Nome, and at $6.50 \mathrm{p} . \mathrm{m}$. on May 29 the Bear steamed to the north. The next day, June 1, we encountered alternate rain and snow, and at $2.30 \mathrm{p} . \mathrm{m}$. commenced to encounter floating ice. At $9 \mathrm{p} . \mathrm{m}$. the ice pack was so solid that the ship was compelled to turn and work its way back to clear water.

June 2, from 4 to 8 a. m., there was considerable loose ice. The ship skirted along the edge of Nunivak Island until noon, when it became necessary to enter the ice field. At $10 \mathrm{p} . \mathrm{m}$. we sighted the steamship Dora fast in the ice, and at 10.20 the Bear itself became fast in the ice pack, where we remained until the next morning. At $5.30 \mathrm{a} . \mathrm{m}$., June 3, getting loose from the pack, the ship tried to find an open lead to the north, failing in which she turned and tried various courses to the southward. Passing near the steamship Dora, the Bear worked through the ice until she could pass a line to the Dora, and making fast, hauled her loose from the ice which bound her.

Steaming slowly ahead as far as possible, leads of slush-ice were found, and we reached and spoke the steamers Senator and Portland, both of which were fast in a small basin of open water surrounded with pack ice. With cheers from their passengers they attempted to follow in the wake of the Bear, but soon gave it up. The steamship Dora also got fast in the ice again, and was left behind. At $11.30 \mathrm{a} . \mathrm{m}$. we sighted the steam schooner Fulton. At this time there were three schooners in sight, fast in the ice.
Turning again to the northward the Bear steamed through the ice, frequently coming to a dead stop; then backing out and putting on all steam would drive into the ice until a passage was forced through the more solid ice to the rotten ice again. This was kept up until 8.30 p . m., when unable to go farther, with an unbroken ice field as far as could be seen in front with marine glasses from the "crow's nest," the ship was tied up to the ice for the night. During the night new ice was formed in the open places and the old ice was greatly strengthened. At $5.10 \mathrm{a} . \mathrm{m}$., casting loose from our icy wharf, and unable to make any impression on the ice ahead of us, we turned again to the south, working slowly through the ice.
At $1.30 \mathrm{p} . \mathrm{m}$. the ship turned and worked to the eastward. As we passed in sight again of the steamships Senator and Portland their rigging was crowded with passengers watching the Bear force her way through the ice fields. One of the passengers whom I afterwards saw at Nome said that it was the grandest sight he had ever seen, and worth the cost of the trip to witness. Again and again a thick fog shut down, adding greatly to the perplexities of navigation.

Toward midnight it seemed as if we would be again balked and compelled to try another way, but just then open leads were seen from the crow's nest, where an officer was constantly kept on watch, and by dint of hard pounding the intervening ice was broken through and soon after midnight open leads were reached. At 2.10 a. m., June 5, the ship was again in open water, and the three days' struggle in the ice pack was over. By 8 o'clock a. m. the ice had been left out of sight behind us.

At $4.20 \mathrm{p} . \mathrm{m}$. Cape Nome was sighted, and at $7.30 \mathrm{p} . \mathrm{m}$. the Bear anchored opposite the city. First Lieut. D. H. Jarvis and Mr. Johnston left the vessel for shore. Officers boarded the barks Alaska, Mary Hume, and Cleveland, and a number of calls were received from officials and others on shore.

June 6 opened with a southeast storm, causing a heavy surf on shore. At 9.30 a. m. signals of distress were observed on the bark Alaska. An officer was at once sent from the Bear to investigate. He found her bumping on the bottom of the sea in 16 feet of water, and wanting a steam tug to pull her into deeper water.

The steamer Nary Hume ran a line to her, but could not tow her out. Soon after she lost her rudder and became unmanageable. Cutting loose from the steamer, she hoisted her jib sail and ran on the beach. In the afteinoon an officer and crew were sent from the Bear, and the officers and crew from the bark Alaska were brought to the Bear, only a guard being left on the stranded vessel.

The following morning, a lull occurring in the storm, the crew of the wrecked bark Abaska were sent ashore. Availing myself of the opportunity I also went ashore to secure if possible a meeting of the school board of Nome. The sea was still very rough, and in attempting to cross the bar at the mouth of the Snake River our boat grounded in the surf, and for a little while we were in great danger. Springing from the boat it was lifted over the bar and we finally reached the shore in safety. A meeting of the school board was secured and a committee appointed to select suitable sites for future school buildings.

The meeting of the school board continued so late that I was unable to return to the ship that evening, and during the night the storm increased in severity so that I was unable to return to the ship for three days. On the morning of June 8 the revenue cutter Bear, commencing to drag her anchors, got up steam and went to sea, and by evening there was not a single vessel left in the harbor. During the day the bark Alaska went to pieces, and her cargo was strewn along the beach for miles. In this cargo were the annual supplies for the mission stations of the Swedish Evangelical Union at Unalaklik and Golofnin Bay, and also for the Congregational mission at Cape Prince of Wales. During the morning of the 8th the school committee had a second meeting. Present: Walter Church, chairman; D. W. McKay, secretary, and Messrs. S. A. Kellar, E. S. Ingraham, and J. V. Logan. The Rev. Mr. Robins, Congregational minister, was present by invitation.

On June 9, although it snowed hard all day, Judge Church and myself tramped over all sections of the city in search of a suitable place for a future school building. On June 10, the storm having abated and the cutter Bear having returned to its anchorage, I was able to return to my quarters on board the ship. During the evening the revenue cutter Corwin, having in tow the dismantled bark Catherine Sudden, which had been picked up as a derelict, having been abandoned by her officers and crew while in the ice, arrived in harbor.

June 11, went ashore to attend a meeting of the school board, at which a report was received from the subcommittee on the location of school sites recommending three locations in different parts of the city, after which I returned to the ship. On June 12 Messrs. C. E. Gay, Charles Find, and Dr. Contrise were received on board the Bear, and at $10 \mathrm{p} . \mathrm{m}$. we steamed away for Port Clarence. At midnight, while en route, anchored off Synrock to deliver supplies to Charley Antisarlook. At 3 a.m., June 13, we were again under way. At $9.30 \mathrm{a} . \mathrm{m}$. ice was encountered, passing through which we reached King Island at 10.40 a. m. Shetdama, an Eskimo
woman, and her son, who were among those taken last fall, as witnesses in a murder trial, to Sitka, were now returned home. As the natives coming off to the ship in their kyaks recognized her on the deck, they called out the death of a daughter during her ten months' absence.
At noon we were again under way for Port Clarence. Upon rounding Point Spencer it was observed that the winter ice was still unbroken in the bay and extended some distance out to sea. Steaming up to the edge of the ice, some natives who were sealing came off with their umyak and took with them from the boat Romuk and Pugumuk, the two Port Clarence Eskimo women who had also been to Sitka as witnesses. At 7.30 p . m., loosing from the ice, the vessel steamed toward Cape Prince of Wales. At $7.45 \mathrm{p} . \mathrm{m}$. the boat was stopped, and the captain picked up a boat load of Eskimos who wanted a tow.

At $11.30 \mathrm{p} . \mathrm{m}$. the ship was forcing her way through heavy drift ice, and $2 \mathrm{a} . \mathrm{m}$. on the 14th anchored off Cape Prince of Wales. Mr. Lopp, the Congregational minister, and some natives soon came aboard, and at once commenced landing supplies that had been brought for them. Mr. Lopp was notified that his annual supplies shipped on the bark Alaska had been lost. At $2.35 \mathrm{p} . \mathrm{m}$. a heavy field of ice drifted down upon the Bear, and it was compelled to hoist its anchor and get under way. Getting free from the ice, the Bear returned to its anchorage off the village at $6 \mathrm{p} . \mathrm{m}$. The gale continuing through the night, no further landing of supplies was possible until the afternoon of the 15th, when all the supplies for that station were unloaded and taken on shore by the natives.

Having finished unloading, the Bear got under way at 11.10 p. m., and at 2.10 a. m. on June 16 anchored off the mining camp at York. Messrs. Hadley, Gay, Zollander, and Domingoes were landed, and Messrs. William Marshall, Deputy United States Marshal McNally, and John Kerby were received on board. At 6.40 a . m. the ship was again under way. From 1 to 2 p. m. a heavy field of drift ice was encountered, and at $9 \mathrm{p} . \mathrm{m}$. anchor was dropped at Nome.

At $8 \mathrm{a} . \mathrm{m}$. on Sunday, June 17, word was brought to Captain Tuttle that the bark Hunter had been wrecked in the ice and 30 passengers were on the beach near Cape Romanzof with but four days' provisions. An officer was at once sent on shore to investigate the rumor. Finding the news of the wreck confirmed, steam was at once ordered, and at 1.10 p. m. the Bear was on the way to the scene of the disaster.

Much scattering ice was encountered during the day. At $3.20 \mathrm{p} . \mathrm{m}$. on the 18th Cape Romanzof was sighted, and at $4.10 \mathrm{p} . \mathrm{m}$. the wrecked vessel was seen. Approaching as near as was safe, the Bear came to anchor, and at $5.30 \mathrm{p} . \mathrm{m}$. Lieutenants Bertholf and Scott, with crew of men, were sent off to the wreck in a sailing launch. Returning at 11 p. m., they reported that they had visited the Hunter and had found her stern stove in and her main deck badly broken up. They also visited the shore inside of the sand spit and learned from the natives that a steamer had taken the shipwrecked passengers away. At 11.45 p. m. the Bear started on her return to Nome. From 4 to 8 a . m. much loose ice was encountered, passing through which by $8.30 \mathrm{a} . \mathrm{m}$. the ship skirted along the western edge of the ice field, on which large numbers of walruses were seen.

At $9.20 \mathrm{a} . \mathrm{m}$. on the 20 th the Bear reached its anchorage at Nome. Much of the time on the 19th and 20 th was spent on shore. Word being received by the captain that the quarantine station at Egg Island, near St. Michael, needed assistance, the Bear got under way at 1.45 p. m. June 22. Deputy Collector Wright was received on board for a trip to St. Michael. At 3.05 a . m. a stop was made at the improvised quarantine station at Egg Island, where there had been reported some trouble among the passengers of the steamers Ohio and Santa Anna, which, arriving at Nome with smallpox on board, were sent into quarantine.

At $4.10 \mathrm{a} . \mathrm{m}$. , the officer and boat returning from the quarantine station, the Bear got under way for St. Michael, where anchor was dropped at 5.30 a . m. Going
ashore with the captain, I procured mail for the officers and crew of the Bear, for the missionaries at Unalaklik, and for the employees at the Eaton Reindeer Station. At $7.35 \mathrm{a} . \mathrm{m}$. we were again under way, and at $1 \mathrm{p} . \mathrm{m}$. dropped anchor abreast of Unalaklik.
I was at once sent ashore, accompanied by an officer, in the second cutter. Finding Dr. F. H. Gambell, superintendent of Eaton Reindeer Station, at Unalaklik, I was able to arrange for going to the station, 8 miles up the Unalaklik River. As it was important that I should have an interpreter in the settlement of the annual accounts with the Lapp employees, the Rev. Julius Qvist, Swedish missionary, was invited to accompany us.

On Sunday, the 24th, divine services were held with the Lapps and employees at the reindeer station, and, rising early on the 25 th, a long day was employed in settling accounts, paying annual salaries, and inspecting work. This having been accomplished satisfactorily, in the evening we returned to the Swedish mission at Unalaklik, bringing with us Johan I. Tornensis and wife, whom I wished to transfer to the charge of the herd at Teller Reindeer Station.

At $1.30 \mathrm{a} . \mathrm{m}$., June 26, a boat arriving from the ship for me, I rose and went aboard, reaching it at $3.40 \mathrm{a} . \mathrm{m}$. It was some time, however, before the trade goods with the Lapp family arrived. At 10.30 a . m., everything being on board, the Bear got under way for Nome, where it anchored at 9.55 a . m. on the 27 ch . On June 28 the Rev. T. L. Brevig, Lutheran missionary to the Teller Reindeer Station, with wife, two children, and a servant girl, also an Eskimo boy who wished to visit his brother at Port Clarence, and the Rev. J. Kirk, of Eagle, were received on board. The sea was very rough in returning from the shore to the ship. At $10.55 \mathrm{p} . \mathrm{m}$. the Bear got under way for Port Clarence.

June 29 the ship steamed all day through a dense fog. In the evening, the water shoaling up to 5 fathoms, the captain anchored at $8.05 \mathrm{p} . \mathrm{m}$. When at $6.05 \mathrm{a} . \mathrm{m}$. June 30 the fog lifted, it was found that the ship had passed through the straits and up the whole length of Port Clarence Bay in the fog of the evening before without our knowing it, and we were now near the mouth of Grantly Harbor. The vessel was got under way and thirty minutes later anchored in front of Teller Reindeer Station. Work was at once commenced landing Mr. Brevig and family, also Mr. and Mrs. Tornensis. Finishing the landing of the supplies at the station, the Bear, at 2.30 p. m., started for Point Spencer, reaching the point and anchoring off the sand spit at 5.10 p. m., when an officer boarded the whaler Beluga.

At 6.15 we were again under way, and at $10.35 \mathrm{p} . \mathrm{m}$. anchored off the new mining town of York. The following day, July 1, the citizens, learning that there were two ministers on board, improvised a religious service, which was held in an unfinished store building, both ends of the building being open to the weather. This is probably the first religious service held in that camp.

Hearing that there was an epidemic of measles at Cape Prince of Wales, and that the servants and children of Mr. Lopp were sick, the captain concluded to steam up to the Cape and offer the services of his surgeon. Consequently, at $5.30 \mathrm{p} . \mathrm{m}$. we were under way, anchoring off Cape Prince of Wales village at $7.25 \mathrm{p} . \mathrm{m}$. Dr. Hawley was immediately sent ashore. Upon his return he reported that five of the natives had died, and that all the five children of Mr. Lopp had been sick, but were recovering, and that many of the natives were still very ill.

At 9.30 p . m. July 1 the Bear got under way for King Island, which was reached at 8 o'clock on the morning of the 2d. Dr. Hawley was at once sent ashore to take the census of the native village, and was accompanied by several officers who wished to get a closer view of the houses of the cave dwellers, take photographs, etc. All having returned at 12.25 p. m., the Bear again got under way, reaching Synrock at $8.45 \mathrm{p} . \mathrm{m}$. the same evening. At this place an officer and boat's crew were sent ashore to examine the feasibility of floating a sloop that had been blown on the
beach during the recent storm. In due time they returned with the report that the water was so shallow that no help could be afforded.
The remainder of the supplies on board for Charley Antisarlook were landed, and at $10.35 \mathrm{p} . \mathrm{m}$. the ship was again under way, reaching Nome at 2.45 a . m., July 3. July 4 was observed at Nome with a small procession and a large crowd at the opera house to listen to the reading of the Declaration of Independence and the making of addresses by distinguished men. July 6 another storm swept the sea and broke the steam launch Islam from its moorings and stranded several small vessels.

At $2.30 \mathrm{p} . \mathrm{m}$. Kayuia, one of the St. Lawrence boys that had been rescued from the bark Alaska at the time it went ashore, died of pneumonia. At $2.55 \mathrm{p} . \mathrm{m}$. the ship got under way for Sledge Island, where, at $3.50 \mathrm{p} . \mathrm{m}$. , an officer and men, accompanied by the several Eskimos on board the ship, were sent ashore with the body. The Eskimos had tied up the body in sail cloth, native fashion. It was carried up the side of the mountain and then left on the ground, which is the usual method of the Eskimos of this region of disposing of their dead. At $4.30 \mathrm{p} . \mathrm{m}$. we were again under way, and at 9.50 anchored off Nome.

There having been some disturbance at the mining camp at Top Cock, the Bear got under way at $4.15 \mathrm{p} . \mathrm{m}$., July 10, and at midnight anchored at Top Cock. An officer was sent ashore to communicate with Captain Walker, U. S. A. At $1.20 \mathrm{a} . \mathrm{m}$. the officer returned, reporting that Captain Walker was in Bluff City, a few miles farther along. Half an hour later the Bear stopped at Bluff City, and the officer was again sent ashore, returning with the report of Captain Walker that the situation was then quiet. The cutter at $2.55 \mathrm{a} . \mathrm{m}$. got under way for Golofnin Bay, which was reached at $7.40 \mathrm{a} . \mathrm{m}$. Mail was delivered to the Coast Survey steamer Patterson, and aiter breakfast the captain, myself, and others went to the village, where I had a conference with the Swede missionaries, and arranged to loan Okitkoon a herd of reindeer this present winter. About $2 \mathrm{p} . \mathrm{m}$. we returned to the ship, and at $6.10 \mathrm{p} . \mathrm{m}$. were under way on our return to Nome, calling again at Bluff City at 10.10 p. m.

At $6.15 \mathrm{a} . \mathrm{m}$. . July 12, the Bear anchored off Nome. On the 12 th and 13 th negotiations were entered into with Mr. Nils Klemetsen for him to take charge of the herd of reindeer to be placed on St. Lawrence Island. He changing his mind and declining to go, arrangements were made with Mr. A. A. Bahr. During the afternoon the household belongings of a leading native of Port Clarence, who had recently died, were brought on board the Bear to be conveyed to his relatives; also a sick man and woman, together with an orphan child. The following day the sick man, being found to be the interpreter of the Swedish mission at Golofnin Bay, and having means of his own, was transferred from the ship to the St. Bernard Hospital, where he afterwards died.
On Sunday, the 15 hh, preached in the Presbyterian chapel tent at Nome. The surf was so high that it was with difficulty that the captain was able to launch his boat and return in the evening to the ship, the boat filling with water as we passed through the surf. Changing our wet garments, at $5.30 \mathrm{p} . \mathrm{m}$. the Bear got under way for Port Clarence. Word having been received during the day that Charley Antisarlook was sick, at 11.15 p.m. the Bear stopped opposite Synrock, and Surgeon Hawley was sent ashore to prescribe for the sick man. Upon his return, getting under way at $11.40 \mathrm{a} . \mathrm{m}$., July 16, the Bear anchored off the sand spit at Point Spencer, where the native child, the sick woman, and the dead man's household goods were landed among the relatives.

The landing having been accomplished, at $3.30 \mathrm{p} . \mathrm{m}$. the Bear proceeded up the bay to Teller Reindeer Station, which was reached at 5 o'clock. The United States army transport Seward was also anchored there. Going ashore and procuring some reindeer trade goods needed for barter on the Siberian shore, I returned to the ship, and at 9.35 p . m. we were under way across the bay to Port Clarence City, where the captain, at 11.15 p.in., sent an officer ashore with a letter to the deputy marshal,
requesting him to warn all miners and others not to interfere with the reindeer that were in that vicinity, reports having been received of threats against the herd. The officer, returning, reported that but 30 people were left in the city and that the deputy marshal was gone. At midnight we got under way again and proceeded to the sand spit, where we anchored at $2 \mathrm{a} . \mathrm{m}$. on the 17 th .

A storm prevailing on the outside, the Bear lay all day at anchor. The gale having somewhat abated, the Bear got under way at $10.20 \mathrm{p} . \mathrm{m}$. and anchored opposite Cape Prince of Wales at $7.15 \mathrm{a} . \mathrm{m}$. on the 18th. Accompanying Surgeon Hawley ashore, I had a further opportunity of arranging school matters for the coming winter at the Cape. Returning aboard at $3.05 \mathrm{p} . \mathrm{m}$., the ship steamed for the Diomede Islands, where at noon on the 19th Dr. Hawley, a number of the officers, and myself went ashore on Krusenstern Island, Surgeon Hawley being detailed to take the census of that island and also visit the sick. Returning to the ship at $3.10 \mathrm{p} . \mathrm{m}$. , we got under way, anchoring off East Cape, Siberia, at 7.40 p. m.

Several boat loads of natives visited the ship, after which we started at 10 p. m., working through the loose ice, passed through the straits, rounded East Cape, and at $12.25 \mathrm{a} . \mathrm{m}$. on the $20 t \mathrm{~h}$ anchored off the Siberian village of Whalen. Securing a native boat and an interpreter at this point, at $2.40 \mathrm{p} . \mathrm{m}$. we were under way, skirting the Arctic coast of Siberia in search of reindeer. At $4.45 \mathrm{p} . \mathrm{m}$. stopped off Inchowan and landed a native. Again under way at $5.10 \mathrm{p} . \mathrm{m}$. We next called at Tschutpan, in a field of scattered ice. Resuming the voyage at $8.10 \mathrm{p} . \mathrm{m}$., the ship worked slowly through the drift ice for Cape Serdze until $11.35 \mathrm{p} . \mathrm{m}$., when the course was changed inshore, stopping at $12.25 \mathrm{a} . \mathrm{m}$. on the 21 st to communicate with some deer men whose houses were seen on the beach.

At $2.15 \mathrm{a} . \mathrm{m}$. resumed the journey, calling at Anurarune at $3.15 \mathrm{a} . \mathrm{m}$., and communicating with the deer men of the vicinity. At $5 \mathrm{a} . \mathrm{m}$. under way to clear water. In the afternoon took on board 4 deer and some sacks of moss. Hoisting anchor at 7.25 p. m., the steamer worked its way through heavy drift ice around Cape Serdze, and at $10.25 \mathrm{p} . \mathrm{m}$. anchored opposite a Tchuchee village west of the Cape.

During the 22 d 25 additional deer were taken on board, also a number of sacks of moss. Getting under way at $8.35 \mathrm{p} . \mathrm{m}$., the Bear went west, calling at various settlements, to Koliuchin Bay, in the effort to secure more deer. Failing to secure an additional load, the Bear turned eastward on its course, working through a number of fields of drift ice, calling at a number of stations, and finally reaching St. Lawrence Bay, Siberia, where it anchored at 3.05 a . m. on the morning of July 24.

At all the villages at which we called the prevailing epidemic was experienced, and in a number of them there were not a sufficient number of deer men that were not sick to drive the herds to the coast and catch the deer for the ship. Two days were spent in St. Lawrence Bay visiting the homes of the deer men and taking a fresh supply of water. Here, as elsewhere, the people were all sick and no deer could be procured.
Leaving St. Lawrence Bay at 9.10 a. m. July 26, the ship anchored at Indian Point, Siberia, on the same evening at 11.15 o'clock, where communication was had with shore. At this point it was reported that one-half of the population had died. Hearing of some herds to the southwest, at $3.15 \mathrm{a} . \mathrm{m}$. on the 27 th the Bear got under way for Butankof Bay, where we anchored at $5.30 \mathrm{a} . \mathrm{m}$. Boats were sent ashore and a conference was had with the deer men, but the herds were found to be some miles in the interior, and the herders were sick and were unwilling to drive them down to the coast.

Giving up any further attempts to secure reindeer, at $9.25 \mathrm{a} . \mathrm{m}$. the ship hoisted anchor and steamed away for St. Lawrence Island, reaching the settlements at Gambell at $2.45 \mathrm{p} . \mathrm{m}$. It had been in the plans of the Department for two or three years to stock this large and important island with a herd of reindeer, but it had not been convenient to do so until the present season.

Reaching the village, we met an unexpected difficulty. The people were so discouraged by the large number of deaths that they had lost all hope and ambition, and did not care whether they secured the reindeer or not, although on several preceding seasons when we visited them they had been begging and urging that deer should be placed upon their island. The temporary discouragement was so great that none could be found who were willing to become herders. Under the circumstances, nothing could be done but abandon the project of placing deer upon the island and return the deer to Teller Reindeer Station.

During the night, however, some of the younger men of the village who had been off hunting returned, and finding that I had decided to take the deer away, they called a meeting of the more progressive men of the village and came to me with their earnest remonstrances against not landing the deer. Informing them that it was a question of finding a number of young men who were willing to become apprentices and learn to manage deer, they at once offered their own sons. Consequently, on the afternoon of the 30 th, 29 reindeer were landed on the island to the eastward of the village.

During our stay at Gambell Captain Tuttle kindly sent two carpenters ashore to enlarge the school building, which had lecome too small for the community. An addition 20 feet square was added to it. A frame was erected and inclosed during the three days' stay of the steamer. At 9.35 o'clock on the evening of the 30 th we returned to Indian Point, Siberia, which we reached at $4.40 \mathrm{a} . \mathrm{m}$. on the 31st.

At this point a Siberian by the name of Jack, who had been the source of much drunkenness and rioting at St. Lawrence Island, even threatening the lives of the Government teachers, was landed with his family. Getting under way at 8.45 a . m., Kings Island was reached at midnight and Teller Reindeer Station at 7.15 a . m. August 1. After a short stay of three hours, Point Spencer was reached at noon.

Leaving there at $12.45 \mathrm{p} . \mathrm{m}$., we passed Stewart Island at $10.40 \mathrm{p} . \mathrm{m}$. on the 2 d , and reached St. Michael at $4.30 \mathrm{a} . \mathrm{m}$. on the 3d. Spending the day at St. Michael, at $10.50 \mathrm{p} . \mathrm{m}$. the Bear steamed for Unalaklik, which we reached at 2 o'clock a. m. the 15 th. Leaving me at Unalaklik, the Bear returned to St. Michael. From Unalaklik I went up the river to Teller Station, where final arrangements were completed for the starting of 11 Laplanders with their families for a return to Norway.

Loading themselves and baggage in rowboats, on the evening of the 6th we returned to the mouth of the river at Unalaklik, and early on the morning of the 7th, the Bear having returned from St. Michael, the Laplanders and their baggage were on board the ship. Hoisting anchor at $10.20 \mathrm{p} . \mathrm{m}$., we started for Nome, reaching the mouth of Nome River at $1.50 \mathrm{p} . \mathrm{m}$. on the 8th. Here the Laplanders were transferred from the Bear to the U. S. army transport Lauton, after which the Bear proceeded to Nome City, dropping anchor at 3.25 p. m. On the evening of August 10, the Bear having concluded its preparations for its trip to Point Barrow, the captain very kindly transferred me to the U. S. transport Lauton, Capt. William S. Pinkston, quartermaster's agent, in command, and Capt. F. Magune, sailing master. On Sunday morning several officers, passengers, and myself went ashore for divine service, at the close of which we found that the sea was too rough to return to the ship. On the morning of the 13th, the surf being still high, Governor John G. Brady and I went down to the military camp at the mouth of Nome River, hoping to be able to reach the ship from there; but in this we were disappointed.

During the delay we were kindly entertained by Major Van Orsdale, U.S.A., and his estimable wife. On the morning of the 14th, the surf having somewhat abated, we were taken off, with many others, to the transport Lawton in a lighter. In addition to several Government officials who were returning to the States, and members of the families of the officers at military posts in Alaska, 146 stranded miners were taken into the steerage for transportation to Seattle.

All parties being on board, soon after noon the steamer started for Unalaska, reaching there, after a stormy and foggy trip, the 18th. While in Unalaska the Government school and the Methodist Mission Orphanage were both visited. At $4.30 \mathrm{p} . \mathrm{m}$. of the 21 st, bidding adieu to the friends at Unalaska and Dutch Harbor, the Lawton steamed out of the harbor past Priests Rock and started southward for Seattle, where we arrived, after an uneventful trip, on the 28th.
Immediately upon my arrival I had a conference with Mr. A. Chilberg, deputy Norwegian consul, arranging for the transportation of the Laplanders to their native country. This also consumed the whole of August 29. We took the train over the Northern Pacific Railroad at $7.25 \mathrm{a} . \mathrm{m}$. on the morning of the 30 th. The Lapps had a tourist sleeping car to themselves, which added greatly to their comfort; but the warm weather, to which they were unaccustomed, caused much suffering and greatly affected the five babies that were in the party. Duluth was reached at $8 \mathrm{a} . \mathrm{m}$. on September 2. As we had to spend the day in that place, I took the opportunity of calling in a physician, who ministered to the sick babies. Leaving Duluth at 7 o'clock p. m. that evening over the Duluth, South Shore and Atlantic Railway, Sault Ste. Marie was reached at $10.40 \mathrm{a} . \mathrm{m}$. September 3, and Montreal at 8 a . m. September 4. At Montreal arrangements were made with the Allan Steamship Company to take charge of the Lapps, not only across the ocean to Liverpool, but across England to Hull, from Hull to Bergen, Norway, and from Bergen by steamer up the coast to Lapland. The extreme heat still affecting the children, the services of a physician were again needed.
Having done all that I could to promote the comfort and interest of the Lapps, in the evening I took the train for New York City, reaching there early on the morning of the 5 th, and at noon left for Washington. On the day following my arrival in Washington the salaries of the Lapps returning to Norway were secured and arrangements made, through the courtesy of the honorable Secretary of State, by which the moneys due the Lapps could be paid them upon their arrival at Liverpool, through the United States consul at that port.
Having completed these arrangements, I returned to New York on the 7th to make sure that the money should be sent by the Saturday steamer, thereby reaching Liverpool in advance of the Lapps. Returning to Washington September 8, the long summer's travel of 16,587 miles was ended.

Very respectfully, yours,
Sheldon Jackson,
United States General Agent of Education in Alaskia.
The Conmissioner of Education.

## OHAPMER XXXIV.

## CHTY SCHOOL SYSTMMS.

TABLE 1.-Summary of statistics of cities containing over 8,000 inhabitants, showing increase from previous year.

|  | 1898-99. | 1893-1800. | Increase. | $\begin{aligned} & \text { Per cent } \\ & \text { of } \\ & \text { increase. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Number of city school systems | 632 |  | a 64 |  |
| Enrollment. | 3,920, 4.67 | 3,949, 501 |  | 0. 74 |
| Avgregate namber or attendance . . . . . . | 50, 931,679 | 50, 118 , | 2,200,008 | 5 |
| Average length of the school term, in | 187.9 | 18.7 | C. 2 |  |
| Enrollment in private and parochial sch | 913, 369 | 929,338 | 15,968 | 1.75 |
| Male supervising officers | 2, 220 | 2.358 | 38 | 1.64 |
| Female supervising officers. | 2,270 | 2,376 | 106 | 4.67 |
| Whole number of supervising | 4, 590 | 4, 939 | 144 | 3.14 |
| Number or mave teachers. | 6, 02 | 6, $00 \pm$ |  | . 11 |
| Number of female teacher | 76, $3 \pm 5$ | \%7, 189 |  | 1.11 |
| Number of buildings...... | 9, 3 , 65 | 80,493 9,190 |  | 1.89 |
| Number of seats .-- | 3,635, 4.86 | 3,665, 13 | 29,427 | . 82 |
| Value of school property | 3312, 698, 680 | \$822, 77\%, 9991 | \$10,079.306 | 3.20 |
| Expenditure for tuition | 855, 629, 787 | ๑59, 183, 266 | 83, 493, 79 | 6.87 |
| Total expenditure... | 993, 413,946 | 409, 457, 233 | \$6,044, 188 | 6.47 |

a Decrease.
Table 2.-Summary, by States, etc., of enrollment, attendance, supervising officers, and teachers in cities containing over $\mathcal{S}, 000$ inhabitants.

|  |  |  |  |  | Number of supervising officers. |  |  | Number of teachers. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Male. | Female. | Total. | Male. | Female. | Total. |  |
| 2 | : | 4 | \$ | 6 | $g$ | 4 | (1) | 113 | 11 | 14 | 13 |
| 588 | 25, 105, 730 | 3,949,561 | 553, 118, 781 | 2,940,978 | 2,358 | 2,376 | 4,734 | 6,304 | 77, 189 | 83,493 | 929,33\% |
| 240 | 12,383,505 | 1,9\%9,5:3 | 273, 129, 266 | 1,430,914 | 1,085 | 1,153 | 2,238 | 2,897 | 39,293 | 41, 1:20 | 450, 864 |
| 43 | 1,777,503 | 271,888 | 35, 144,619 | 197, 33 E | 134 | 157 | 291 | 513 | . 5,023 | 5,536 | 47, 884 |
| 50 | $1,557,331$ | 2009, 706 | 27,340,3:6 | 151.593 | 136 | \% 0 | 206 | 458 | 3,616 | 4,074 | 41, 87\% |
| 201 | 8,045, 511 | 1,32:, 503 | 187,675,539 | 1,006,714 | 811 | \& $\because 9$ | 1,649 | 2,146 | 26,091 | 28,237 | 363,113 |
| $3!$ | 1,321,880 | 1215, \%38 | 29,829,041) | 160, 490 | 192 | $16 \%$ | -359 | 330 | 4,166 | 4,49\% | 25,626 |
| 9 | 164, 639 | 23,303 | 3,341,13\% | 18,935 | 21 | 17 | 38 | 52 | 593 | 645 | 8,376 |
| 9 | 158,920 | 19,634 | 2,669, 850 | 15,0\% | 16 | 15 | 31 | 42 | 453 | 494 | 0,43: |
| 3 | 38,587 | 6,0158 | -833, 383 | 4,680 | 6 | 4 | 10 | 7 | -144 | 151 | 1.971 |
| 56 | 2,132, 623 | 351,317 | 54, 859, 767 | 283, 143 | 197 | 134 | 331 | 69 | $7.70 \pm$ | 8,3*3 | 66,234 |
| 10 | (317, 89\% | 59, 158 | \%,420,009 | 38,389 | 18 | 23 | 41 | 95 | 1,152 | 1,247 | 13,939 |
| 20 | 542, 756 | 84,486 | 12,5\%5, 8 si | 65,224 | 70 | 57 | $1: 7$ | 119 | 1,963 | 2,084 | 23,001 |
| 5 | 4,979,169 | 769,719 | 107, 399,427 | 562, 661 | 419 | 694 | 1,043 | 978 | 14, 754 | 15, 73.2 | 189,048 |
| $2{ }^{\prime \prime}$ | 1,133,001 | 182, 417 | 24, 064, 074 | 1:6,32\% | 151 | 103 | 2ñ | 130 | 3,493 | 3,623 | 39,370 |
| 54 | 2, 865, 92\% | 433, 431 | 59,96: 737 | 316,488 | 187 | 176 | 363 | 725 | - 8,036 | 8,761 | 99,443 |
| 1 | 76,503 | 11,025 | 1,595, 405 | 8,078 | 2 | 3 | 5 | f | $2 \times 2$ | 247 |  |
| 5 | 557.374 | 87,003 | 11,487, 989 | 58,751 |  |  |  | 178 | 1,701 | 1,879 |  |
| 1 | 278,713 | 46,519 | 6,321,038 | 35, 463 | 25 | 45 | $7{ }^{1}$ | 136 | 1,020 | 1,156 |  |
| 10 | 271.695 | 35, 279 | 4,886, 159 | 26, 490 | 43 | $\stackrel{6}{7}$ | 49 | 65 30 | ${ }^{582}$ | 647 | 7,51.5 |
| ${ }_{7}^{4}$ | 73, 603 | 13,509 | 1,855, 653 | 10,111 | 11 | 7 | 18 | 30 | 278 | 308 | 2,129 |
| , | 100. 170 | 14,578 | 1,679,355. | $9,50{ }^{\text {a }}$ | 9 | 6 | 15 | 20 | 166 | 186 |  |
| $\tau$ | 243, 669 | 40, 114 | $5,655,603$ | 32, 189 | $2 \%$ | 19 | 41 | 70 | 684 | 754 | 4,119 |
| 4 | 79,129 | 9,7\%3 | 993,004 | 6,487 | - | ) | 12 | 20 | 173 | 193 | 5,100 |
| 10 | 362,959 | 50, 754 | 7,389,558 | 38,901 | 46 | 38 | 84 | 76 | 952 | 1,028 | 14,527 |
| $6_{6}$ | 269,918 | 36, 88.5 | 4, 737, 5.7 | 20,440 | 38 | 6 | 44 | 70 | 505 | 635 | 5,890 |
| 6 3 3 | 133,706 | 14, 19\% | 1,722, 447 | 10,058 | 9 10 | 1 | $\frac{10}{17}$ | $\%$ | 256 116 | 282 | 2,188 |


TABLE 3．－Summary，by States，etc．，of school property and expenditures in cîties containing over $\mathcal{S}$ ，, 00 inhabitants．

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| ＇səsod －and［Ootos ．rof pesu Kquədo．むd ว！̣quditr jo onte $\Lambda$ | － | $\begin{aligned} & 8 \\ & 8 \\ & 8 \\ & 10 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |
| －ipnqs <br> xof s．8u！̣łtis so <br> sqとөs Jo ．Iaquiñ | 89 | $\begin{gathered} \frac{0}{60} \\ \frac{20}{3} \\ 0 \\ 0 \end{gathered}$ |  |  |  | Rox $180$ |  |
| ＊s．outpinnq <br>  | 5 | $\frac{8}{\stackrel{8}{2}}$ |  | $\underset{\sim}{\text { co }}$ |  | $\stackrel{\rightharpoonup}{2}$ | 必に汽 |


Table 4.-Comparative statistics of cities containing over $\mathcal{S}, 000$ inhabitants, summarized by States, etc.

| Cities of- | Ratio of private school enrollment to enrollment in all schools, public and private. | Ratio of average attendance to enrollment (public schools). | Average number of days' attendance of each pupil enrolled. | Average length of school term. | A verage number of pupils in attendance to each teacher. | Average number of teachers to each supervising officer. | Average number of seats to each $100 \mathrm{pu}-$ pils in attendance. | Average number of seats to a building | Value of school proferty per capita of pupils in average attendance. | Cost of teaching and supervision ner capita of pupils in average attendance. | Total cost of schools per capita of pupilis in average attendance. | Average costper day of tuition for one pupil. | Average daily expenditure per pupil for all purposes. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | $\gamma$ | © | 9 | 10 | 11 | 118 | 18: | 14 |
| United States | $\begin{array}{r} \text { Per cent. } \\ 19.1 \end{array}$ | $\begin{array}{r} \text { Per cent. } \\ 74.6 \end{array}$ | Days. | Days. 187.7 | 35.3 | 17.6 | 124.4 | 399 | \$109.53 | \$20. 10 | \$33.78 | $\begin{array}{r} \text { Cents. } \\ 10.70 \end{array}$ | Cents. 17.99 |
| North Atlantic Division | 18.9 | 74.2 | 141.6 | 190.9 | 34.8 | 18.4 | 124.2 | 387 | 120.90 | 21.65 | 38.80 | 11.34 | 20.32 |
| South Atlantic Division. | 15.0 | 72.6 | 199.2 | 178.1 | 36.3 | 19.1 | 130.3 | 371 | (65.22 | 16.82 | 23.77 | 9. 44 | 13. 35 |
| South Central Division. | 16.6 | $7 \% .3$ | 130.4 | 180.5 | 37.8 | 19.8 | 123.1 | 301 | ${ }^{68.17}$ | 15.51 | 29. 81 | $\stackrel{8.46}{9.93}$ | 15.99 |
| North Central Division Western Division ........ | 21.5 10.6 | $\begin{array}{r} 76.1 \\ 74.3 \end{array}$ | 142.7 138.2 | 188.4 185.9 | 35.1 35.7 | 12.5 | 124.8 | $\begin{array}{r}479 \\ 379 \\ \hline\end{array}$ | 124.20 | 24.51 | 29.81 36.79 | 13. 19 | 19.79 |
| North Atlantic Division: |  |  |  |  | 29.4 | 17.0 | 148.1 | 142 | 101.71 | 16.16 | 20.49 | 9.15 | 11.61 |
| Maine --.------ | 3). 4.4 | 76.7 | 136.0 | 177.3 | 30.5 | 15.9 | 129.2 | 153 | 144.31 | 18.16 | 27.17 | 10.24 | 15. 33 |
| Vermont | 21.6 | \%7.2 | $13 \% .5$ | $1 \% 8.1$ | 31.0 | 15.1 | 153.7 | $23 \%$ | 123.48 | 15.67 | 41.41 | 8.80 | 23.25 |
| Massachusetts | 15.9 | 80.6 | 156.2 | 193.7 | 33.8 | 25.3 | 122.7 | 260 | 159.10 | 22. 43 | 39.47 | 11.58 | 20.37 |
| Rhode Island | 19.1 | 64.9 | 125. 4 | 193.3 | 30.8 | 30.4 | 139.3 | 216 | 125.92. | 20.75 | 83. 59 | 10.74 | 17.37 |
| Connecticut | 21.4 | 77. ${ }^{\text {\% }}$ | 148.8 | 192.8 | 28.4 | 16.4 | 126.3 | 298 | 118.00 | 19.62 | 33.34 46.09 | 13. 289 | 24.13 |
| New York- | 19.7 | 83.0 | 139.5 | 191.0 | 3.8 3.1 3.1 | 14.1 14.3 | 117.9 | ${ }_{5018}^{618}$ | 124.27 | 25.38 18.33 | 46.69 31.46 | 13.29 9.62 | 24.13 16.52 |
| New Jersey | 17.7 18.7 | 69.3 73.0 | 181.8 138.3 | 190.4 189.4 | 32.1 36.1 | 14.3 24.1 | 127.0 131.1 | 4 | 83.65 <br> 104.70 | 18.33 16.75 | 31.46 31.47 | 9.62 8.84 | 16.58 16.6 |
| South Atlantic Divison: |  |  |  |  |  |  |  |  |  | 15. 45 | 31.93 | 7.84 | 16.21 |
| Delaware |  | 88.3 | 184.6 | 197.0 195.6 | 32.7 31.3 | 49.6 | 13.2 | 38. | 83.63 | 15.45 | 81.98 | 7.8 |  |
| District of Columbi |  | 76.2 | 135.9 | 181.0 | 30.7 | 16.5 |  |  | 12.56 | 23.65 | 34.63 | 13.07 | 19.14 |
| Virginia. | 17.6 | \%5.1 | 138.5 | 184.4 | 40.9 | 13.2 | 126.5 | 447 | 45.20 | 12.47 | 19.96 | 6. 76 | 10. 82 |
| West Virginia | 13.6 | 74.9 | 137.3 | 183.5 | 32.8 | 17. 1 | 121.7 | 300 | 129.88 | 13.96 | 24.32 | 7.61 | 13.26 |
| South Carolina |  | 65.5 | 115.1 | 175.9 | 51.3 | 12.4 | 136.0 | 649 | 27.40 | 9.15 | 13.02 | 5. 0 | 7.41 |
| Georgia | 9.3 | 80. $\%$ | 141.0 | 175.7 | 42.7 3.6 | 18.4 | 117.4 | $\stackrel{239}{23}$ | ${ }_{23} 46.02$ | 13.04 | 15. 60 | $7: 42$ 8.33 |  |
| Florida -- ${ }^{\text {ath }}$ Central Division: | 34.3 | (66. 4 | 101.6 | 153.0 | 33.6 | 16.1 | 164.5 | 243 | 23.33 | 13.05 | 16.11 | 8.38 | 10.53 |
| Kentucky | 22.3 | 76.6 | 145.6 | 190.0 | 27. 8 | 12.2 | 130.7 | 431 | 60.83 | 16.68 | 24.90 | 8.78 | 13.11 |
| Tennessee | 13.8 | 71.7 | 128.4 | 179.2 | 41.6 | 14.4 | 106.2 | 395 | 56. 73 | 12. 91 | 17.43 | 7.20 | 9.73 |
| Alabama | 13.4 | ${ }^{7} 1.8$ | 111.3 | 171.2 | 85. 7 | 28.2 | 112.7 | 343 | 59.75 | 13.27 | 19.91 | 7.75 | 11.63 |
| Mississippi |  | 63.7 70.7 | 112.0 | 175.8 184.5 | 29.2 33.4 3 | 7.8 38.6 | 118.2 | 329 | 69.64 | 15.34 | 25.85 | 8.31 | 14.01 |
| Texas | 12.9 | 71.6 | 124.0 | 173.3 | 36.6 | 47.9 | 128.6 | 318 | 84.01 | 16.43 | 22.30 | 9.48 | 12.87 |


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TABLE 5．－Summarized statistics of schools in cities of over 8，000 inhabitants from 1890－91 to 1800－1900，inclusive．

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| $$ | $\cdots$ |  |  <br>  |  <br>  |  |



TaELE 7．－Statistics of population and school eniollment and attendance in cities of over $\mathcal{S , 0 0 0}$ inhabitants，1899－1900．

|  | City． |  | School population． |  | $\begin{aligned} & \text { Papils in private and parochial } \\ & \text { schools (largely estimated). } \end{aligned}$ | Different pupils enrolled in pub－ lic day schools． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| 1234456 | ALABAMA． |  |  |  |  |  |  |  |  |  |  |
|  | Anniston | 9，693 |  |  |  |  |  |  |  |  |  |
|  | Birmingham | 38，415 | 7－21 | 9，543 | 700 | 2，168 | 2，607 | 4，7\％ | $17 \%$ | 565,515 | 3，195 |
|  | Huntsville． | 8，068 | －－21 | 2，100 | 200 | $2 \% 6$ | $2 \% 5$ | 551 | 176 | 79， 200 | ， 450 |
|  | Mobile ．．．．．－ | 38， 469 | 7－21 | 18， 638 |  |  |  |  |  |  |  |
|  | Montgomery | 30，346 | 7－21 | 5， 111 | 350 | 1，199 | 1，411 | 2，610 | 164 | 313,514 | 1，918 |
|  | Selma．．．－－． | 8，713 | 7－21 | ＊3， 100 | 150 | 525 | 689 | 1，145 | 165 | 141， 045 | 873 |
|  | AREANSAS． |  |  |  |  |  |  |  |  |  |  |
| 78910 | Fort Smith | 11，587 | 6－21 | 4．，700 | 500 | 1，250 | 1，351 | 2， 601 | 175 | 35， 695 | 2，015 |
|  | Hot Springs | 9，973 | 6－21 | 3，207 | 100 | 1，231 | 1，240 | 2，471 | 178 | 306，516 | 1，722 |
|  | Little Rock | 38，307 | 6－21 | 11，005 |  | 2，481 | 2，816 | 5，297 | 176 | －671， 188 | 3，813 |
|  | Pine Bluff ． | 11，496 | 6－21 | 3， 345 | 125 | 1，105 | 1，190 | 2，295 | 173 | a 258，289 | a 1，493 |
|  | CALIFORNTA． |  |  |  |  |  |  |  |  |  |  |
| 11 | Alameda | 16， 464 | $5-1 \%$ | 3， 600 | 249 | 1，710 | 1，645 | 3， 355 | 196 | 455， 265 | 2，329 |
| 12 | Berkeley | 13，214 | 5－17 | 3， 193 | 450 | 1，308 | 1，261 | 2，569 | 193 | 437， 720 | 2，269 |
| 13 | Fresno ．－ | 12， 470 | 5－1\％ | 2，477 | 78 | 1，009 | 1，185 | 2，194 | 181 | 2\％7， 705 | 1，537 |
| 14 | Los Angel | 102， 479 | 5－17 | 30，358 | 2，165 | 9，975 | 10，522 | 20，497 | 189 | 2，864，430 | 15，156 |
| 15 | Oakland＊ | 66，960 | 5－17 | 15，993 | 1，974 | 5，988 | 5，900 | 11，888 | 193 | 1，656， 624 | 8，370 |
| 16 | Pasadena | 9，117 | 5－17 | 2，822 | 294 | 1，074 | 1，14\％ | 2，221 | 169 | 288， 432 | 1，707 |
| 17 | Sacrament | 29，282 | 5－17 | 5，387 | 329 | 2，130 | 2，271 | 4，401 | 186 | 608， 034 | 3，269 |
| 18 | San Diego | 17，700 | 5－1\％ | 3，468 | 240 | 1，6444 | 1， 707 | 3，351 | 189 | 489， 132 | 2，587 |
| 19 | San Francisco | 342， 782 | 5－17 | ＇8，554 | 9，311 | 20，861 | 21，443 | 43， 304 | 199 | $6,457,152$ | 32，448 |
| 20 | San Jose | 21，500 | 5－17 | 5，321 | 631 | 2，052 | 2，211 | 4，263 | 192 | 608， 640 | 3，170 |
| 21 | Stockton | 17，506 | 5－17 | 3，547 | 641 | 1，486 | 1，430 | 2，916 | 189 | 39\％， 742 | 2，078 |
|  | COLORADO． |  |  |  |  |  |  |  |  |  |  |
| 23 | Colorado Springs ．．．． | 21， 085 | 6－21 | 5，183 | 200 | 2，105 | 2，246 | 4， 351 | 188 | 53\％，984 | 2．968 |
|  | Cripple Creek school district <br> Denver： | a55， 000 | 6－21 | 6，41： | 150 | 2，2\％8 | 2,409 | 4，687 | 176 | 54？，41： | 3，087 |
| $\begin{aligned} & 24 \\ & 25 \\ & 26 \\ & 27 \\ & 28 \end{aligned}$ | District No．1．－．－－ |  | （6－21 | 17，481 |  | 6， 009 | 6，392 | 12，401 | 185 | 1，782，845 |  |
|  | Distric¢ No． |  | 6－21 | 9，112 | 300 | 3，505 | 3， 710 | 7，215 | 178 | 1，889，121 | 4，997 |
|  | District No． | 13．3， 839 | （6－2］ | 1，217 | 0 | 499 | 520 | 1，019 | 183 | 155， 733 | 851 |
|  | District No． |  | 6－21 | \％ 2,206 | 583 |  | 2，502 | 5，024 | 176 | 64．2，2\％ | 3，649 |
|  | Leadville ．．．．．． | 12， 455 | 6－21 | 3,058 | 500 | $98 \%$ | 1，004 | 1，991 | 190 | 28： 910 | 1，489 |
| 2930 | Pueblo： <br> District No． 1 |  | （6－21 | 4，79\％ | 69 | 1．292 | 1，436 | 2，728 | 183 | 32t，64？ |  |
|  | District No． 20 | 2S， 154 | $\{6-21$ | 5，273 |  | 1，253 | 1， 459 | 2，712 | 173 | 316， $0 \div 1$ | 1，8：\％ |
|  | CONNECTICUT． |  |  |  |  |  |  |  |  |  |  |
| 31 | Ansonia．．． | 12，681 | 4－16 | 3，108 |  | 1，146 | 1，192 | 2，358 | 188 | 363，${ }^{\text {r }} 80$ | 1，93j |
| 3 | Bridgeport | 70， 996 | 4－16 | 16，8：27 | 2，500 | 5，858 | 5， 953 | 11，811 | 184 | 1，445，945 | 7，853 |
| 33 | Bristol（town）．．．．．．．－－ | 9，643 | 7－14 | 2，0\％9 | － 44 | $9{ }^{\circ} 0$ | $92 \%$ | 1， 89 | 195 | 275，535 | 1，413 |
| 34 | Danbury（town）．．．．．． | 19， 474 | 4－16 | 4，493 | 610 |  |  | 3．087 | 196 | 458， 441 | 2， 339 |
| $3{ }^{35}$ | Hartford ．－．－．．．．．－．－－ | 79，850 | $4-16$ | 15，127 |  |  |  | 10， 473 | 192 | $1,624,864$ | 8，442 |
| 35 | Manchester（town）＊－－ | 10，601 | 4－16 | 2，262 |  |  |  | 2，291 | 189 | 290， 204 | a1，536 |
| 37 | Meriden（town）．．．．．． | 28，695 | 4－16 | 6，471 |  |  |  | 3，904 | 200 | 649，200 | 3，246 |
| 38 | Middletown－－．－．．．．．． | 9，589 | 4－16 | 1，918 | 600 |  |  | 1，281 | 181 | 130，231 | 1，051 |
| 39 | Naugatuck（town）－ | 10，511 | 4－16 | 2，043 | 1， 63 |  |  | ＊2，203 | 190 | ＊337， $9: 30$ | ＊1．760 |
| 40 | New Britain．－．．．．．．－ | 25， 998 108,027 | 4－16 |  | 1，500 | 2,099 8,790 | 1，943 | 4，042 | 190 | 637,830 $2,818,800$ | 3,35 14,094 |
| 4.2 | New London | 17，548 | 4－16 | 22,61 3,409 | 2，983 | 8， 190 | 8， 331 | $17,3 \% 1$ 2,200 | 200 | $\begin{array}{r}2,818,800 \\ 342 \\ \hline 190\end{array}$ | 14,091 1,801 |
| 4.3 | Norwalk（town） | 19， 932 | 4－16 | 4，51\％ | 737 |  |  | 3，576 | 189 | $472,1 \geqslant 2$ | 2，493 |
| 44 | Norwichicentral dis－ trict） | 617， 251 | $4-16$ | 1，511 | $400$ |  |  | 1，30＊ | 192 | 192， 384 | 1，002 |
| 45 | Stamford．．．－．．．．－．－－ | 15，997 | 4－16 | 4，506 | 659 | 1，550 | 1，546 | 3， 196 | 198 | 527， 472 | 2，664 |
|  | ＊Statistics of 1898－9 |  | $a$ Est | imated． |  | $b$ Pop | ulation | of city | y of N | orwich． |  |

TABLE 7.-Statistics of population and school enrollment and attendance in citics of over 8,000 inhabitants, 1899-1900-Continued.


Table 7.-Statistics of population and school enrollment and attendance in cities of over 8,000 inhabitants, 1899-1900-Continued.


Table 7.-Statistics of population and school enrollment and attendance in cities of over \&,000 inhabitants, 1899-1900-Continued.


Table 7．－Statistics of population and school enrollment and attendance in cities of over S，000 inhabitants，1899－1900－Continued．

|  | City． |  | School population． |  | $\begin{aligned} & \text { Pupils in private and parochial } \\ & \text { schools (largely estimated). } \end{aligned}$ | Different pupils enrolled in pub－ lic day schools． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 感 |  | $\begin{aligned} & \text { त⿹\zh26灬 } \\ & \text { ET } \end{aligned}$ |  |  |  |
|  | 1 | $\mathfrak{2}$ | 3 | 4 | 5 | 6 | $\gamma$ | 8 | 9 | 10 | 11 |
|  | matimland－cont＇d． |  |  |  |  |  |  |  |  |  |  |
| 179 | Cumberland | 1\％，1．8 |  |  |  |  |  |  |  |  |  |
| 131 | Frederick．．． | 13，591 | C－\％ | 2200 |  | 650 | 00 | 1，490 | $16 \tilde{1}$ | 901 | 3 |
|  | massaciueseters． |  |  |  |  |  |  |  |  |  |  |
| 182 183 | Adams（town）．－． Amesbury（town） | 11，134 | 5－15 | 2，395 | 480 | 2． | 625 | 2，213 | 185 | 325， 045 | 1，757 |
| 184 | Arlington（town）．．．．． | 8，603 | 5－15 | 1，364 | 200 | 112 | 802 | 1，514 | 184 | 232， 392 | 1，263 |
| 185 | Attleboro（town） | 11，335 | 5－15 | 2，10： | 50 |  |  | 2，132 | 192 | 311，502 | 1，614 |
| 186 | Beverly－－－－－－ | 13， 88. | 7－14 |  | ${ }^{0}$ |  |  | 2，475 | 192 | 390，585 | 2，003 |
| 187 | Boston | 560，892 | 5－15 | 86，505 | 13，515 | 46，394 | 44，212 | 90，606 | 197 | 15̌，895， 890 | 78，695 |
| 188 | Brockton－．．．．．．． | 40， 063 | 5－15 | ＊6，281 | 744 | 3，312 | 3，388 | 6，700 | 180 | 1，020，240 | 5，668 |
| 189 | Brookline（town） | 19， 935 | 5－15 | 2.934 | ${ }^{318}$ | 1，855 | 1，762 | 3， 617 | 198 | 566， 08.2 | $\stackrel{2}{2}, 859$ |
| 191 | Chelsea | 34，0：2 | \％－14 | 3，629 | $\cdots$ | 3，040 | 3，016 | 10，056 | 189 | 2，496，${ }_{9256}$ | 12，904 |
| 192 | Chicopee | 19，167 | 7－14 | 1，582 | 891 | 1，188 | 1，205 | 2，393 | 192 | 391， 102 | 2，031 |
| 193 | Clinton（town） | 13， 667 | 7－14 | 1，610 | 394 |  |  | 2，302 | 190 | 344，470 | 1，813 |
| 194 | Danters（town） | 8，512 | 5－15 | 1，384 |  | 805 | 241 | 1，548 | ＊190 | ＊242， 630 | ＊1，277 |
| 195 | Everett． | 21，356 | \％－14 | 3，548 | 0 | 2， 111 | 2， 746 | 5，45\％ | 187 | 820， 853 | 4，389 |
| 156 | Fall River | 104， 863 | 5－15 | 19，261 | 4，809 | 8，803 | 8，2s0 | 17，095 | 186 | 2，113，332 | 11，362 |
| 197 | Fitchburg | 31，531 | 5－15 | 6，036 | 2，000 | 2，213 | 2，146 | 4，363 | 188 | 667，964 | 3，553 |
| 198 | Framingham（town）－ | 11，302 | 5－15 | 1，880 |  | 1，090 | 1，102 | 2，192 | 16.2 | 293， 800 | 1， 808 |
| 199 | Gardner（town）．－．．．． | 10， 813 | 5－15 | 1，896 |  | 1，014 |  | 1，982 | 172 | 261,096 | 1，518 |
| ${ }_{201}^{260}$ | Gloucestel | 20，121 | 7－14 | 2， $77 \%$ | 215 | 2，38： | 2，481 | 4，863 | 192 | 827， $55 \%$ | 4，299 |
| 2012 | Haverhil | 37，19 | ${ }^{5-15}$ | 5， 886 9,208 | 1,693 4,416 | 3，301 | 3，238 | 5，424 | 187 | ${ }^{8159}$ ，3：0 | 4,360 <br> 4 |
| 203 | Hyde Park（town） | 13， 244 | 5－15 | 2，096 | ， 41 | ， |  | 1，935 | 193 | 283，903 | 1，471 |
| 204 | Lawrence．．． | 62， 5.59 | 5－15 | 10，045 | 2，300 |  |  | 8，781 | 195 | 1，263，405 | 6，4 49 |
| 205 | Leominster（town）＊－． | 12，392 | 5－15 | 1，646 |  |  |  | 2，105 | 193 | 302， 817 | 1，569 |
| 204 | Lowell | 94， 909 | 5－15 | 14， 470 | 4， 000 | 7，256 | 6， 701 | 13， 957 | 185 | 1，785， 435 | 9,651 |
| 206 | Lynn＊ | 69，513 | 5－15 | 19，543 |  | 5， 203 | 5， 353 | 10， 556 | 189 | 1，615， 761 | 8，549 |
| 208 | Malden | 33， 664 | \％－14 | 4，011 | 1，103 | 3， 101 | 3,273 | 6，374 | 188 | 949，950 | 5， 066 |
| 209 | Marlbor | 13，608 | 5－15 | 2，968 | 625 | 1，151 | 1，2\％8 | 2， 429 | 180 | 407，640 | $\stackrel{2}{2} 263$ |
| 210 | Medford | 18，244 | 8－14 | 1，963 | 13 |  | 1，953 | 3，911 | 187 | 557， 821 | $\stackrel{2}{2}, 98$ |
| 211 | Melrose | 12， 262 | 5－15 | 2，188 | 00 | 1，530 | 1，514 | 3，044 | 195 | 448，080 | 2，344 |
| 210 | Miliford（town） | 11，3：6 | 5－15 | 1，4i4 | 500 |  |  |  |  | 223，496 | 1，260 |
| 213 | Natick（town） | 9， 488 | \％－14 | 1，148 |  |  | 1，016 | 1，968 | 185 | 309，046 | 1，671 |
| 214 | New Bedford | 62， 44.2 | 5－15 | 10， 116 | 3，52へ | 4，720 | 4，630 | 9，3．50 | 191 | 1，301，092 | 6，812 |
| 215 | Newburyport | 14， 3788 | ${ }_{5-15}^{5-15}$ | 2,445 5,105 | $\begin{gathered} 620 \\ 220 \end{gathered}$ | 2． 909 | 3，009 | － | 200 | 285， 400 | 1，427 |
| 217 | North Adar | 24，200 | 5－15 | 4，315 | 1，370 | 1．724 | 2，070 | 3，794 | 188 | 512，488 | \％， 726 |
| 213 | Northampton | 13，643 | 5－15 | 3，035 | 500 | 1，364 | 1，388 | 2， 752 | 200 | 449，200 | 2，246 |
| 219 | Peabody（town） | 11，523 | 5－15 | 1，923 | 412 | 1，068 | 858 | 1，926 | 195 | 298，545 | 1，531 |
| 220 | Pittsfield | 21， 760 | 5－15 | 4， 119 | $\% 5$ | 1，915 | 1，971 | 3，886 | 190 | 574， 293 | 3，031 |
| 221 | Plymonth（town） | 9，592 | 5－15 | 1，471 |  |  |  | 1，758 | 193 | 262，094 | 1，358 |
| 223 | Revere（town） | 10，393 | 5－15 | ＊1，9\％ | 0 | 1，109 | 1， 154 | 2，263 | 192 | 746,909 356,736 | 1， 1,858 |
| 234 | Salem－－ | 35，956 | 5－15 | 6，188 | 2，519 | 2，641 | 2，250 | 4， 891 | 205 | 814，465 | 3， 973 |
| 225 | Somerville | 61，643 | 8－14 | ＊5， 943 | 1，50\％ | 5，084 | 5，338 | 10，422 | 185 | 1，671，105 | 9，033 |
| 223 | Southbridge（town）．－ | 10，0\％ | 5－15 | 2，018 | 994 | 662 | ${ }^{676}$ | 1，338 | 191 | 162， 317 | 847 |
| 228 | Taunton | 62，099 | 7－14 | 9,202 3,301 | 1，408 631 | 5，634 | $\stackrel{5}{5,225}$ | 10,809 4,918 | ¢ 190 | $1,660,980$ 832,010 | 8,742 4,189 |
| 229 | Wakefiela（town） | 9，290 | 7－14 | 1,016 | 0 | 1，118 | 1，118 | 2，236 | 183 | 300,303 | 1,641 |
| 230 | Waltham | 23， 481 | \％－14 | 2，621 |  | 1，509 | 1，553 | 3，062 | 193 | 501，926 | 2，598 |
| 231 | Ware（town）＊ | 8，263 | 5－15 | 1，45t |  |  |  | 1，326 | 193 | 202，257 | 1，049 |
| 23 | Watertown（town） | 9，706 | 5－15 | 1，47\％ | 485 | 68 | 666 | 1，352 | 185 | 204， 425 | 1，105 |
|  | Webster（town）＊－．．． | 8， 804 |  | $\underset{2}{1,643}$ |  |  |  | ， 914 | 187 | 115，192 | 1，616 |
| ${ }_{235}^{234}$ | Westineld（town）－．．．－ Weymouth（town） | 12， 11,310 | 5－15 | $\begin{array}{r}\text { 2，} \\ \times 1 \\ \times 1 \\ \hline\end{array}$ | 257 | 1，050 | 1，079 | $\stackrel{2}{2,129}$ | ${ }_{196}^{200}$ | 329,600 c38， 200 | 1,648 $c 950$ |

[^98]$b$ High school was in session 200 days．
$c$ Estimated．

Table 7.-Statistics of population and school enrollment and attendance $i .2$ cities of over $\bar{\xi}, 000$ inhubitants, 1899-1900-Continued.

|  | City. |  | School population. |  |  | Different pupils enrolled in public day schools. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | $\begin{aligned} & \text { ? } \\ & \text { H } \\ & \text { E- } \end{aligned}$ |  |  |  |
|  | 1 | ${ }_{8}$ | 8 | 4 | 5 | $6{ }^{6}$ | g | 8 | (1) | 1 (1) | 且且 |
| $\begin{aligned} & 236 \\ & 237 \end{aligned}$ | MASSACHUSETTS-con tinued. | $\begin{array}{r} 14,254 \\ 118,421 \end{array}$ | $\begin{aligned} & 5-15 \\ & 7-14 \end{aligned}$ | $\begin{array}{r} 3,147 \\ 14,240 \end{array}$ | $\begin{array}{r} 411 \\ 3,023 \end{array}$ | 1,535 | 1,345 | $\begin{array}{r} 2,880 \\ 21,982 \end{array}$ | $\begin{array}{r} 200 \\ 200 \end{array}$ | $\begin{gathered} 0 \\ 0 \\ 3,393, \\ 3,33, \end{gathered}$ | $\begin{array}{r} .2,466 \\ 16,766 \end{array}$ |
|  | Woburn Worcester |  |  |  |  |  |  |  |  |  |  |
|  | , |  |  |  |  |  |  |  |  |  |  |
| 238 | Adrian | 9,654 | 5-20 | 2, 5.54 | 25 | 887 | 85 | 1,720 | $19 \pm$ | 254, 722 | 1,313 |
| 239 | Alpena-... | 11,802 | 5-20 | 4, 418 | 1,200 | 1,269 | 1,047 | 2,390 | 196 | a $29.98,312$ | 2,002 |
| 241 | Battle Creek | 18,563 | 5-20 | 3,943 | 350 | 1,615 | 1, 788 | 3,403 | 186 | 398,663 | 2,681 |
| 242 | Bay City | 27, 628 | 5-20 | 9,581 | 2,500 | 2,204 | 2,461 | 4,725 | 198 | 688, 664 | 3,468 |
| 243 | Detroit | 285, 704 | 5-20 | 80,835 | 14,091 | 19,974 | 19,176 | 39, 150 | 194 | 5, 703, 794 | 29,401 |
| 244 | Escanaba | 9,549 | 5-20 | 2, 705 | 750 | 752 | 758 | 1,510 | 187 | 220,847 | 1,181 |
| 245 | Flint | 13,103 | 5-20 | 3,170 | 200 | 1,206 | 1,178 | 2,384 | 189 | 373,920 | 1,968 |
| 246 | Grand Rapids | 87,545 | 5-20 | 26,865 | 3, 007 | 11,044 | 11,375 | 22, 419 | 189 | 2,303,343 | 12, 187 |
| ${ }_{2} 247$ | Iron Mountain | 9,242 | 5-20 | 2,972 | 0 | 1,241 | 1,163 | 2,403 | 180 | 347,040 | 1,928 |
| 248 | Ironwood. | 9,705 | 5-20 | 2,950 | 500 | 1,146 | 1,162 | 2,308 | 198 | 320,364 | 1,618 |
| 249 | Ishpeming | 13,255 |  | 4, 022 |  |  |  | 3,207 | 200 | 474, 200 | 2,371 |
| 250 | Jackson. | 23, 180 | 5-29 | 5, 793 |  | 2,129 | 2,196 | 4,325 | 191 | 582, 932 | 3,059 |
| 251 | Kansing | 24, 404 | 5-20 | 5,740 |  | 2,100 | 2, 138 | 4,238 | 179 | 605,133 | 3,357 |
| 250 | Manistee | 14, 260 | 5-20 | 4, 885 | 511 | 1,68, | 1,553 | 3,235 | 195 | 517, 684 | , 618 |
| 294 | Marquette* | 10,058 | 5-20 | 2,826 | 400 | 1,020 | , 950 | 1,970 | $18 \%$ | 253, 572 | 1,356 |
| 255 | Menomineo | 12,818 | 5-21 | 4,500) | 350 | 1,455 | 1,553 | 3,008 | 183 | 453, 43.2 | 2, 478 |
| 256 | Muskegon | 20,818 | 5-20 | 7,074 | 1,000 | 2,617 | 2,538 | 5,185 | 187 | 658,240 | 3, 5:20 |
| 257 | Owosso | 8, 693 | 5-21 | 2,350 |  | 1,000 | 1,100 | 2, 100. | 175 | 292, 775 | 1,673 |
| ${ }_{259}^{259}$ | Pontiac .-. | 9,769 | 5-20 | 1,960 | 220 | 761 | 786 | 1,547 | 200 | 228, 709 | 1,143 |
| 259 | Port Hition <br> Saginaw: | 19, 158 | 5-20 | 6,025 | 960 | 1,859 | 2,003 | 3,862 | 186 | 562, 216 | 2,871 |
| 280 | East side |  | $\{5-20$ | 8,288 |  | 2,515 | 2,554 | 5, 069 | 193 | 788,981 | 4,088 |
| 261 | West si | 42, 310 | (5-20 | 5,408 | 500 | 1,86\% | 1,849 | 3,711 | 193 | 525, 53.3 | 2,723 |
| ${ }_{26}^{26}$ | Sault Ste. Marie | 10, 538 | 5-21 | 2, 394 | 250 | 962 | 960 |  | 192 | 270,554 | 1,409 |
| 263 | Traverse City | 9,407 | 5-20 | 2,400 | 200 | 1,05\% | 1,154 | 2, 211 | 180 | 279, 9006 | 1,555 |
| 264 | West Bay City *-..... | 13, 119 | 5-20 | 4, 076 |  |  |  | 2, 760 | 194 | 357, 806 | 1,999 |
|  | minnesota. |  |  |  |  |  |  |  |  |  |  |
| 265 | Duluth | 52,969 |  |  |  |  |  |  |  |  |  |
| 206 | Mankato | 10,599 | 5-16 |  | 700 |  |  | 1,700 | $17 \%$ | 238, 950 | 1,350 |
| 267 | Minneapolis | 202, 718 | 5-21 |  |  | 17,751 | 18,415 | 30, 166 | b185 | วั, 407, 550 | 29,230 |
| 268 | St. Cloud | 8,663 | 6-21 | 2,950 | 1,000 | 624 | 6.7 | 1,251 | 172 | 172, 688 | 1,004 |
| 269 | St. Paul --. | 163,065 |  |  | 11,000 | 12,372 | 12,695 | 25, 067 | 190 | 3,786, 771 | 20,300 |
| 270 | Stillwater* | 12,318 | 6-19 |  |  | 840 | 925 | 1,765 | 180 | a254, 160 | a1, 412 |
| 271 | Winona. | 19, 714 | 5-21 | 4,866 | 1,721 | 1,913 | 1,936 | 3,849 | 180 | 586,910 | 3,089 |
|  | mississippi. |  |  |  |  |  |  |  |  |  |  |
| ${ }^{27 \%}$ | Meridian. | 14,050 | 5-21 | 4,200 |  | 999 | 1,14\% | 2,146 | 170 | 234,770 | 1,381 |
| 273 | Natchez*. | 12, 210 |  |  |  | 602 | \% 750 | 1,352 |  |  | 850 |
| 274 | Vicksburg | 14, 834 | 5-18 |  | 800 | 775 | 1,321 | 2,096 | 180 |  |  |
|  | MISSOURI. |  |  |  |  |  |  |  |  |  |  |
| 275 | Carthage | 9,418 | 6-20 | 2,874 | 100 | 1,095 | 1,240 | 2, 335 | 180 | 295,380 | 1,641 |
| 276 | Hannibal | 12,780 | 6-20 | 4,545 | 300 | 1,179 | 1,399 | 2,578 | 180 | 328,995 | 1,825 |
| 277 | Jefferson City | 9,664 | 6-20 | 1,863 | $52 \%$ | 576 | . 496 | 1,072 | 180 | 125, 640 | 968 |
| 278 279 | Joplin Kansas City | 163, 26 | 6-20 |  | $1 \% 5$ | - 213,084 | 2,631 14,469 | - 5,117 | 180 | 3,585, 720 | 3,095 19,921 |
| 280 | Moberly | 18,012 | 6-20 | 3, 261 | 500 | 10,774 | 1,904 | 1,6\%8 | 179 | 3, 206, 029 | 1,151 |
| 281 | St.Joseph | 102,979 | 6-20 | 25,574 | 1,200 | 4,535 | 4,921 | 9,45i | 180 | 1,234,620 | 6,859 |
| 282 | St. Louis | 575, 238 | 6-20 | 159,978 | *26, 000 | 38, 292 | 39,971 | 78,263 | 194 | 11,078,952 | 57, 108 |

Table 7．－Statistics of population and school enrollment and attendance in cities of over 8，000 inhabitants，1899－1900－Continued．

|  | City． |  | School population． |  |  | Different pupils enrolled in pub－ lic day schools． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \dot{9} \\ & \text { ت゙゙̈̈ } \end{aligned}$ | 通 | $\begin{aligned} & \text { ت} \\ & \text { تi } \\ & \text { H. } \end{aligned}$ |  |  |  |
|  | 1 | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 110 | 11 |
| $\begin{aligned} & 283 \\ & 284 \\ & 285 \end{aligned}$ | missouri－continued． | $\begin{gathered} 15,231 \\ 23,262 \\ 9,201 \end{gathered}$ | $\begin{aligned} & 6-20 \\ & 5-20 \\ & 6-21 \end{aligned}$ | 4，3：0 | $\begin{aligned} & 300 \\ & 500 \\ & 100 \end{aligned}$ | $\begin{aligned} & 1,703 \\ & 2,398 \\ & 1,011 \end{aligned}$ | $\begin{aligned} & 1,810 \\ & 2,420 \end{aligned}$ | $\begin{aligned} & 3,513 \\ & 4,818 \end{aligned}$ | $\begin{aligned} & 180 \\ & 160 \end{aligned}$ | $\begin{aligned} & 422,280 \\ & 493,600 \end{aligned}$ | 2,3463,085 |
|  | Sedalia |  |  |  |  |  |  |  |  |  |  |
|  | Springfield |  |  | 3，028 |  |  |  |  |  |  |  |
|  | montana． |  |  |  |  |  |  |  |  |  |  |
| 286 | Anaconda | 9，453 | 6－21 | 10，612 | $\begin{array}{r} 1,401 \\ 15 \end{array}$ | 3，276 | 3，360 | 6，636 | 189 | 868，266 | 4，594 |
| 28 | Butte | 30,47014,93010,770 |  |  |  |  |  |  |  |  |  |
| 288 | Great Fall |  | $\begin{aligned} & 0-61 \\ & 6-21 \\ & 6-21 \end{aligned}$ | 2， 981 |  | 8661,091 | 9501,187 | 2，278 | 163 | 283， 032 | 1，736 |
| 289 | Helena＊． |  |  |  |  |  |  |  |  |  |  |
|  | nebraska． |  |  |  |  |  |  |  |  |  |  |
| 290 | Lincoln | 40，169 | 5－21 | 13， 339 | 2，500 | 3,4499,495 | 3,5549,6622,039 | $\begin{array}{r} 7,003 \\ 19,157 \end{array}$ | 185 | 904， 575$2,696,486$ | $\begin{array}{r}5,169 \\ 14 \\ \hline\end{array}$ |
| 291 | Omaha | 102,26,001 | 边 $\begin{aligned} & 5-21 \\ & 5-21 \\ & 5-21\end{aligned}$ |  |  |  |  |  |  |  |  |
| 292 | South Omaha |  |  | 6，300 | 400 | ${ }_{453}$ |  | 4，083 | 180 | 502， 779 | 2，793 |
|  | New hampshire． | $8,886$ | 5－16 | 2，187 | 799 |  | 412 | 865 | 180 |  |  |
| 293 | Berlin．．．． |  |  |  |  |  |  |  |  | 104， 940 | 583 |
| 294 | Concord（Union dis－ trict） |  |  |  |  | 1,368991 | $\begin{aligned} & 1,394 \\ & 873 \end{aligned}$ | 2， 262 | ${ }_{175}^{175}$ |  |  |
| 295 | Dover． | 207 | 16 | 129 |  |  |  | 1，004 |  | $\begin{aligned} & 364,875 \\ & 233,100 \end{aligned}$ | $\begin{aligned} & 2,085 \\ & 1,332 \end{aligned}$ |
| 296 | Keene（Union dis－ trict） |  | 5－16 | $\begin{array}{r} 1,532 \\ * 1,222 \end{array}$ | 150 | $\begin{aligned} & 764 \\ & 710 \\ & \hline \sim 0 \end{aligned}$ | 823 |  | 18 | 221，200 | 1,2591,073 |
| 297 | trict） | 63,165 8,042 |  |  |  |  | 823 | 1，524 | 171 |  |  |
| 298 | Manchester． | 56，98： | $5-16$ | 9，347 | 3,886 | 2，764 | 2，697 | 5，461 | 180 | 719，640 | 3，998 |
| 299 | Nashua | 23， 898 | 5－16 | 4，257 | 1，500 | 1，330 | 1，319 | 2，649 | 180 | 443， 160 | 2，462 |
| 300 | Portsmouth | 10， 633 | 5－16 | 1，791 | 367 | 67\％ | 640 | 1，647 | 178 | 169，650 | ${ }^{1} 975$ |
| 301 | Rochester | 8，466 |  | 1，600 | 300 |  |  | 1，2\％ | 174 |  |  |
|  | NEW JERSEY． |  |  |  |  |  |  |  |  |  |  |
| 302 | Atlantic City | 27， 838 | （ $\begin{aligned} & 5-18 \\ & 5-18 \\ & 5-18 \\ & 5\end{aligned}$ | 5,058$* 8,881$ | 100 | 2，022 | 1,9992,959 | 4，021 | 190 | 500， 840 | 2，${ }_{3}, 713$ |
| 303 | Bayonne | 32，72： |  |  |  |  |  | 5， 8.8 | 193 | 716,609277,500 |  |
| 304 | Bloomfield | 9，668 |  | ＊8，881 | －－－．－．－ | 2，867 | 2，959 |  |  |  | 3,713 1,500 |
| 305 | Bridgeton＊ | 13，913 | 5－18 | 3，18,27818,28 |  | 1，262 | 1，325 | 2，581 | 200 | 277,500 <br> 321,427 | 1，767 |
| 306 | Camden．－ | 75， 935 |  |  | －－．．．．－ |  | 7，126 | 13， 911 | 199 | 1，653，889 |  |
| 307 | East Orange | 21，506 | 5－18 | 1，446 | 485 | $\begin{aligned} & 6,785 \\ & 1,802 \end{aligned}$ |  | 3,7446,400 | 188190 | 542,856$1,121,000$ | －${ }^{8,311} \mathbf{2 , 8 8 7}$ |
| 308 | Elizabeth＊－ | 52,130 | 5－18 | 12，000 | 3，000 | 3,0009.53 | 3，400 |  |  |  | 5，900 |
| 309 | Hackensack＊ | 9，443 |  |  | 250700 |  | $\begin{aligned} & 909 \\ & 388 \end{aligned}$ | 1， 860 | $\begin{aligned} & 197 \\ & 188 \end{aligned}$ | 249,183113,552 | 1,305 <br> 604 <br> 6,560 |
| 310 | Harrison． | 10，596 |  | 3，200 |  | 9.3 312 |  |  |  |  |  |
| 311 | Hoboken | 59，364 | $5-18 * 21,586$ |  | 2，000 | 4，335 | $\begin{array}{r} 388 \\ 4,360 \end{array}$ | $\begin{array}{r} 760 \\ 8,695 \end{array}$ | $\begin{aligned} & 188 \\ & 191 \end{aligned}$ | $1,243,471$ |  |
| 312 | Jersey City＊ | 206， 433 | ¢－18 | 60， 654 |  | $\begin{array}{r}16,401 \\ \hline 999\end{array}$ | $\begin{array}{r}16,405 \\ \hline 995\end{array}$ | 32， 8096 | $\begin{aligned} & 191 \\ & 191 \\ & 200 \end{aligned}$ | 4，015， 554 | 6,560 21 |
| 313 | Kearncy＊ | 10， 896 |  |  | 2， |  |  |  |  | 342，183 | 111,7301,901 |
| 314 | Long Branch | 8，872 | 5－18 | 3，097 |  | 1，963 | 1，312 | 2，675 | $\begin{aligned} & 200 \\ & 180 \end{aligned}$ |  |  |
| 315 | Millville＊ | 10，583 | 5－18 | 2,8453,408$\times 2,408$ | 99 | 1，000 | $\begin{aligned} & 1,137 \\ & 1,340 \end{aligned}$ | 2，137 | 210190 | 281，480 | 1，388 |
| 316 | Montclair． | 13，962 | 5－20 |  | 514 | 1，354 |  | 2，694 |  | 362,900 | 1，910 |
| 317 | Morristown | 11，267 |  | ＊2，792 | 864 | ${ }^{694}$ | 750 | 1，444 | 191 | 206， 470 | 1，081 |
| 318 | Newark．．． | 246，070 | 5－18 | 61，800 | ＊7， 943 | 18，727 | 19，397 | 38， 124 | 191 | 4，932，957 | 25， 827 |
| 319 | New Brunswick | 20，006 | 5－18 | 4，974 |  | 1，440 | 1，381 | $\stackrel{2}{2}, 8: 1$ | 185 | 380， 686 | 2，063 |
| 320 | Orange | 24，141 | 5－18 | 5，825 | 2，025 | 1，488 | 1，565 | 3，053 | 190 | 389,921 | $\stackrel{2}{2,065}$ |
| 331 | Passaic． | 27， 777 | 5－18 | 7，088 | 600 | 2，176 | 2，168 | ${ }_{17}^{4}, 344$ | 190 | － 544,150 | $\xrightarrow{2,864}$ |
| 322 | Paterson－ | 105， 171 | 5－18 | 28， 675 | 3,000 | 8， 621 | 8，463 | 17，084 | 200 | 2，322， 400 | 11，612 |
| 323 | Perth Amboy | 17，699 | 5－20 | ＊3，550 | 300 | 1，448 | 1，422 | 2，870 | 188 | ${ }^{382}, 768$ | 2，035 |
| 334 | Phillipsburg | 10，052 | 5－18 | ${ }_{3}^{2,575}$ | 250 | ${ }^{862}$ | 1929 | 1，791 | ＋ 200 | ＋279，981 | ＊1，396 |
| 33.5 | Plainfield－－．．． | 15， 369 | 5－18 | 3,391 | 600 500 | 1，276 | 1，280 | 2,556 3,108 | ＊ 185 | ＋334， 144 437,526 |  |
| 326 327 | Town of Union | 15， 187 | ${ }^{5-18} 5$ | 4，444 | 501 | 1，552 | 1,556 4,799 | 3,108 9,374 | 195 | ${ }^{437,526}$ | 2,24 6,820 |
| 328 | West Hoboken | 23，094 | 5－18 | ＊ 5,625 |  | 2，050 | 2，000 | 4，090 | 200 | 518， 430 | 2，778 |

＊Statistics of 1898－99．a Population of city of Concórd．b Population of city of Keene．

Table 7.-Statistics of populution and school enrollment and attendance in cities of over 8,000 inhubitants, 1899-1900-Continued.


* Statistics of 1898-99. $a$ Estimated. $b$ There are also 126 pupils in the State normal school.

Table 7.-Statis ics of population and schnol enrollment and attendance in cities of over 8,000 inhabitants, 1899-1900-Continued.


TABLE 7.-Statistics of population and school enrollment and attendance in cities of over 8,000 inhabitants, 1899-1900-Continued.

|  | City. |  | School population. |  |  | Different pupils enrolled in public day schools. |  |  | Number of days pablic schoolswere actually in session. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\frac{\dot{\oplus}}{\stackrel{y}{5}}$ |  | $\begin{aligned} & \text { त् } \\ & \text { O } \\ & \text { E } \end{aligned}$ |  |  |  |
|  | 直 | 5 | 3 | 4 | 5 | 6 | \% | 8 | ¢ | 13) |  |
| 431 | PENNSYLVANIA. <br> Allegheny | 129, 886 | 6-21 | *21,000 | *2, 400 | 9,663 | 10,143 | 19, 806 | *200 | a.2.792,000 | 13,980 |
| 432 | Allentown | 35ั, 416 | 6-21 | *8,000 | 350 | 2,540 | 2,714 | 5,254 | $193 \frac{1}{2}$ | *898, 201 | *, 618 |
| 433 | Altoona | 38, 973 | 6-21 | 9,650 | 1,800 | 3,205 | 3, 270 | 6,475 | 180 | 894, \%80 | 4,971 |
| 434 | Beaver F | 10, 054 | 6-21 | 2, 000 | 200 | 911 | 976 | 1,887 | 180 | 279, 000 | 1,500 |
| 435 | Braddock | 15,654 | 6-21 | *2, 850 | \% 76 | 1,072 | 1,053 | 2, 125 | 180 | 293, 612 | 1,631 |
| 436 | Bradford | 15, 029 | 6-21 | 4,500 | 200 | 1,420 | 1,580 | 3,000 | 185 | 444,000 | 2,400 |
| 437 | Butler | 10,853 | 6-21 | 3,000 | 300 | 1,101 | 1,261 | -2,36\% | 180 | 393, 140 | 1, 823 |
| 438 | Carbondal | 13,536 |  |  | 154 | 1,237 | 1,370 | 2,607 | 195 | 391, 950 | 2,010 |
| 439 | Carlisle | 9,626 | 6-16 | 1,800 | 10 | 690 | 735 | 1, 4:5 | 190 | 247,000 | 1,309 |
| 440 | Chambersbur | 8,864 | 6-21 | 2,000 | 80 | 782 | 851 | 1,633 | 180 | 220, 680 | 1, 226 |
| 441 | Chester | 33,988 |  |  | 500 | 2,5\%1 | 2,812 | 5,383 | 190 | ct702, 480 | *3,697 |
| 442 | Columbia | 12,316 | 6-21 | 3,411 | 450 | 1,016 | 1,023 | 2,039 | 180 | 290, 700 | 1,615 |
| 443 | Danville | 8,042 | 6-21 | 1,700 | 200 | 645 | 698 | 1,343 | 180 | 175, 500 | 975 |
| 444 | Du Bois* | 9,315 |  |  | 400 | 777 | 911 | 1,688 | 160 | 189, 440 | 1,184 |
| 445 | Dunmor | 12,583 | 6-21 | 3,000 |  | 1,2:20 | 1,375 | 2,595 | 200 | 428,400 | 2,140 |
| 446 | Duquesz | 9,036 |  |  | 90 |  |  | 1,558 | 180 |  |  |
| 447 | Easton | 25, 238 | 6-21 | 5, 878 | 85 | 2,078 | 2,034 | 4,112 | 197 | 632, 273 | 3,218 |
| 448 | Erie | 52,783 | 6-21 | 18,000 | 2,548 | 3,727 | 3,886 | 7,613 | 195 | 1,129,635 | 5,793 |
| 449 | Harrisb | 50, 167 | 6-21 |  | 760 | 1,738 | 4,918 | 9,656 | 190 | 1,293,710 | 6,809 |
| 450 | Hazleton | 14,230 | 6-21 | 4,200 | 400 | 1,385 | 1,465 | 2,850 | 180 | 389,340 | 2,163 |
| 451 | Homestead | 12,254 | 6-2] |  | 15 | 1,150 | 1,049 | 2,199 | 180 | 271, 690 | 1,509 |
| 452 | Johnstown | 35, 936 | 6-21 | 8, 450 | 1,8\%7 | 2,69\% | 2,894 | 5,591 | 180 | \%77, 093 | 4,317 |
| 453 | Lancaster | 41, 459 | 6-21 | 9,999 |  | 2,745 | 2,923 | 5, 668 | 200 | 888, 200 | 4, 141 |
| 454 | Lebanon | 17,628 | 6-21 | 4, 500 | 300 | 1,390 | 1,430 | 2,890 | 180 | 351.420 | 1,969 |
| 455 | McKeesport | 34, 297 | 6-21 | 6,351 | 1,200 | 2,8:0 | 2,990 | 5,810 | 180 | 773, 820 | 4,299 |
| 456 | Mahanoy City | 13, 504 | 6-16 | 2,600 | 200 | 1,000 | 1,150 | 2,150 | 180 | 301,500 | 1,675 |
| $45 \%$ | Meadville .-.- | 10,291 |  |  |  | -989 | 1,015 | 2,004 | 180 | 285, 150 | 1,584 |
| 458 | Mount Carme | 13, 179 | 6-16 | 2,800 | 200 | 1,060 | 1,130 | 2, 190 | 180 | 254, 694 | 1,415 |
| 459 | Nanticoke | 12, 116 | 6-16 | 3,300 | 950 | 1,087 | 1,127 | 2,214 | 180 | 273, 960 | 1,522 |
| 460 | Newcastle | 28, 389 | 8-16 | 5,000 | 729 | 2,510 | 2,383 | 4, 893 | 180 | $677,5.00$ | 3, 764 |
| 461 | Norristown | 22,265 | 6-21 | 4,350 | 450 | 1,543 | 1,675 | 3,218 | 200 | 472, 400 | 2,362 |
| $46 \%$ | Oil City* | 13,264 |  |  | 600 | 1,176 | 1,296 | 2,471 | 180 | 324, 960 | 1,802 |
| 463 | Philadelphi | 1, 293, 657 | 6-21 | 268,110 | 50, 006 | 91,574 | 90, 877 | 182, 451 | 188 | 23, 652, 562 | 126,147 |
| 464 | Phœenixvill | 9, 196 | 6-21 | 1,900 | 500 | 585 | 589 | 1,174 | 190 | 157,890 | 831 |
| 465 | Pittsburg | 321,616 |  | * 45,400 |  | 22, $97 \%$ | 23, 289 | 46, 266 | 200 | 7, 06\% , 600 | 35,338 |
| 466 | Pittston | 12, 55 6 | 6-21 | *3,053 | * 750 | 730 | 920 | 1,650 | 180 | 216,000 | 1,200 |
| 467 | Plymouth | 13, 619 | 6-21 | 2,641 | 750 | 955 | 1,031 | 1, 986 | 178 | 20̌2, 938 | 1,421 |
| 468 | Pottstown | 13, 696 | 6-21 | 3,000 | 70 | 1,400 | 1,442 | 2,812 | 200 | 429,200 | 2,146 |
| 469 | Pottsrille* | 15, 710 |  |  | 500 | 1,510 | 1, 472 | 2,988 | 200 | 451, 400 | 2,257 |
| 470 | Reading. | 78, 961 | 6-81 | 19, 641 | 1,500 | 6, 821 | 6, 719 | 13,427 | 193 | 1,915, 71S | 9,926 |
| 471 | Scranton* | 10\%, 026 |  |  | 6,200 | 6,954 | 7,950 | 14, 004 | 200 | $2,2 \pm 2,600$ | 11,213 |
| 472 | Shamokin | 18,202 | 6-21 | 6,000 | 1,350 | 1,809 | 1,845 | 3, 654 | 180 | 474, 660 | 2,637 |
| 473 | Sharon | 8,916 | 6-21 |  | 290 | 801 | 822 | 1, 623 | 180 | 235, 620 | 1,309 |
| 474 | Shenandoan | 20,321 | 6-21 | 3,816 | 450 | 1, 450 | 1,603 | 3.053 | 180 | 421,200 | 2,340 |
| 475 | South Bethlehem* | 13,241 | 6-21 | 2,800 | 900 | 905 | 921 | 1,826 | 200 |  |  |
| $4 \% 6$ | Steelton. | 12,086 | 6-21 | 3,046 | 310 | 984 | 958 | 1,942 | 180 | 304,312 | 1,690 |
| 477 | Sunbury | 9,810 | 6-21 | 2,150 |  | 1,000 | 1, 150 | 2,150 | 180 | 306,360 | 1,702 |
| 478 | Titusville | 8,214 | 6-21 | 2,015 | 400 | 707 | 757 | 1,474 | 184 | 209, 847 | 1,140 |
| 479 | Warren* | 8,043 | 6-21 |  |  | 794 | 842 | 1,636 | 180 | 25゙2, 900 | 1,405 |
| 480 | West Chester | 9,524 | 6-21 | 1,906 | 300 | 780 | 829 | 1,609 | 200 | 213,200 | 1,216 |
| 481 | Wilkeskarre. | 51, 721 |  |  | 1,400 | 4,476 | 4, 498 | 8,974 | 186 | 1,268,892 | 6, 82, |
| 482 | Wilkinsburg | 11,886 | 6-21 | 3, 860 | 500 | 1,04\% | 1,102 | 2, 145 | 180 | 319,860 | 1,77\% |
| 483 | Williamsport | 28,75\% | 6-16 | 5, e00 | 700 | 2,530 | 2,7\% | 5,303 | 180 | 733, 860 | 4,07\% |
| 484 | York .-... | 33, 708 | 6-21 | 7,085 | 630 | 2,248 | 2,367. | 4,615 | 180 | 630, 415 | 3,502 |
|  | RHODE ISLAND. |  |  |  |  |  |  |  |  |  |  |
| 485 | Central Falls | 18, 167 | 5-15 | 3, 402 | 903 | 1, $2 \%$ | 1,22? | 2, 492 | 193 | 292, 781 | 1,517 |
| 486 | Cranston (town) | 13,343 | 5-15 | 2, 160 | 43 |  |  | 2,048 | 195 | 320,385 | 1,613 |
| 487 | Cumberland (town) | 8,925 | 5-15 | 1,966 | 451 | 897 | 696 | 1,593 | 195 | 192, 270 | 986 |

Table 7.-Statistics of population and school enrollment and attendance in cities of over 8,000 inhabitants, 1899-1900-Continued.


TABLE 7.-Statistics of population and school enrollment and attendunce in citics of over 8,000 inhubitants, 1899-1900-Continued.


Table 8-Statistics of supervising oficcers, teachers, property, eic., in public schools of cities of over 8,000 inhabitants, 1899-1900.


Table 8.-Statistics of supervising oifcers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1899-1900-Continued.


Table 8.-Siatistics of supervising officers, teachers, property, eic., in public schools of cities of over S, 000 inhabitants, 1899-1900-Continued.


[^99]TABLE 8.-Statistics of supervising offcers, teachers, property, etc. . in public schools of cities of over 8,000 inhabitanis, 1899-1900-Continued.


Table 8.-Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1899-1900-Continued.


Table 8.-Statistics of supervising officers, teachers, propery, etc.. in public schools of cities of over 8,000 inhabitants, 1899-1900-Continued.


* Statistics of 1898-99.

TABLE 8.-Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1899-1900-Continued.


TABLE 8.-Statisiics of supervising officers, teachers, properiy, etc., in pubiic schools of cities of over 8,000 inhabitants, 1899-1900-Continued.


Table 8.-Statistics of supervising oficers, teachers, property, eic., in putro schools of cities of over s,000 inhabitants, 1899-1900-Continued.


[^100]Table 8.-Statistics of supervising officers, teachers, property, ctc., in public schools of cities of over 8,000 inhabitants, 1899-1900-Continued.


[^101]TABLE 8.-Statistics of supervising offcers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1899-1900-Continued.


Table 8.-Statistics of supervising offcers, teuchers, property, etc., in public schools of cities of over 8,000 inhahitants, 1890-1900-Continued.

*Statistics of 1898-99.

Table 9.-Siatistics of receipts of public schools of cities of over 8,000 inhabitants in 1899-1900.

|  | City. | Receipts for the school year 1839-1900. |  |  |  |  | $\begin{aligned} & \text { Amount } \\ & \text { aravilable } \\ & \text { for rise } \\ & \text { during } \\ & \text { the } \\ & \text { year. } a \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | From city appropriations or taxes | From county and other tazes. | $\begin{aligned} & \text { From all } \\ & \text { other } \\ & \text { sources. } \end{aligned}$ | Total. |  |
|  | , 1 | 2 | 3 | 4 | ٪ | 6 | \% |
|  | alabama. |  |  |  |  |  |  |
| $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 3 \\ & 4 \end{aligned}$ | Anniston -. Truntryill Tobile | $\begin{array}{r} 10,0,000 \\ 3,000 \end{array}$ | $\begin{array}{r} 511,086 \\ 4,000 \end{array}$ | \$6,745 | \$14,844 | S5,695 | $\begin{array}{r} 8.5,5199 \\ \hline, 000 \\ \hline, 000 \end{array}$ |
| $\begin{aligned} & 4 \\ & 5 \\ & 6 \end{aligned}$ | (Montionery | $\begin{aligned} & 7,56 \\ & 6,506 \\ & 3,200 \end{aligned}$ | $\begin{aligned} & 10,1,1990 \\ & 10,000 \end{aligned}$ |  | $\begin{aligned} & \cdots, 86 \\ & 4,000 \end{aligned}$ | $\begin{aligned} & 30,077 \\ & 17,+20 \end{aligned}$ | $\begin{aligned} & 6,29929.290 \\ & 18,200 \end{aligned}$ |
|  | arimangas. |  |  |  |  |  |  |
|  | Fort Smith |  | 5,833) |  | 56,939 | \%2, 825 | 92, 058 |
| $\begin{gathered} 8 \\ 9 \end{gathered}$ | Hot Spring <br> Little Rock | $\begin{aligned} & 28,519 \\ & 12,40,4 \end{aligned}$ |  | 62, 20 | $24,55 \%$ 1,184 | ${ }^{53,071}$ | \%1, 5151 |
|  | Pine Bluff |  |  |  |  |  | 31, 189 |
|  | california. |  |  |  |  |  |  |
| $\begin{aligned} & 11 \\ & 12 \\ & 12 \\ & 13 \\ & 14 \\ & 15 \\ & 16 \\ & 17 \\ & 18 \\ & 19 \\ & 20 \\ & 21 \end{aligned}$ | Alameda. | $3 \pi, 840$ |  | $\begin{aligned} & 24,950 \\ & 0,0550 \end{aligned}$ | \% 77 | 91, 719 79753 |  |
|  | Fresno.- | 16,617 | 22,092 | 10, 0 \% | 1,458 | 50, 202 | ${ }_{619} 93,94$ |
|  | Los Angele | 254, 666 | 106, 361 | 184,321 | 1,523 | 546, 871 | 597\% 326 |
|  | Oakland: ${ }^{\text {Pasadena }}$ |  | 52, 539 $14,65 \%$ | ${ }_{29}^{9,3,765}$ | 1,595 | 277, 78.68 | ${ }_{76,734}^{283,643}$ |
|  | Sacramento | 49,544 | 44, 839 | 28, $13 \%$ |  | 122, $5: 2$ | 128, 993 |
|  | San Diego-- | 28, 210 | 34, 388 | 19, 003 | 52 | ${ }^{82}$ | - 900,545 |
|  | San Francisco | - 2, | 4659 33,327 | ${ }_{29} 9,368$ | 2,460 | 1, $17 \%$ \% 698 | 1,122.358 |
|  | Stockton | 28,598 | $3 \pm, 327$ | 21, 498 | 781 | 85, 204 | 94, 19t |
|  | colorado. |  |  |  |  |  |  |
|  | Colorado Springs ...-.-..... | 21,523 |  | 97, 164 | 21,056 | 139, 746 | 155,784 |
|  | Cripple Creek school district | 15,000 | 123), 600 |  |  |  |  |
|  | District No. 1 |  | 291,547 | 123,416 | 5, 888 | 420,845 | 507, 700 |
|  | District No. ${ }^{\text {District No. }}$ | 5,050 |  | $\begin{array}{r} 164,059 \\ 2,510 \\ 5,510 \end{array}$ | 1,800 | 170,859 29,820 | 189,146 31,421 |
|  | District No. $17 \%$ | 53,815 | 69,49 |  | 14.952 | 138,193 | 14, 812 |
|  | Leadvill |  | 23,313 | 16,934 | 14,933 | 55,240 | 112, $8: 2$ |
| $\stackrel{29}{3 .}$ | Puebiot District No. 1. | 21,638 |  | 60, 473 | 18,20? | 100,343 | 103, 476 |
|  | District No. 20 -.--....... |  |  |  |  |  |  |
|  | connecticut. |  |  |  |  |  |  |
|  | Ansonia | 6,945 | 29, 891 |  |  | 36,830 |  |
|  | Bridgeport. | 107,861 | ${ }^{135,100}$ |  |  | 242,961 | ${ }_{3}^{242,961}$ |
|  | Danbury (town) | 10,692 | 33,017 |  | 2,348 | 46,057 |  |
|  | Hartford .-...... | 35, 441 | $6{ }^{2} 2,000$ | 188,531 | $1100,95 \%$ | 445, 332 | 548,745 |
|  | Manchester (town)* | 5,090 | 28, 630 | 3,2i2 | 1,094 | - 8,5117 | ${ }_{\text {\% }} \times 1178$ |
|  | Midaletown. | 4,315 | ${ }_{21,738}$ | ${ }^{-\cdots 11,367}$ | 3,886 |  | 48,333 |
|  | Naugatuck (town) | 15, 783 | 25, 026 | 16,652 | 501 | 47, 912 |  |
|  | New Britain | 12,980 | 71, 605 |  | 2,958 | 87,553 | 391-20 |
|  | New Haven- |  | 385, 28.9 |  |  |  | -4i,334 |
|  | Nowwalk (town)* | 10,163 | 38.544 | 15.918 | 1,10t | ${ }_{64,4625}^{46,53}$ | 99,000 |
|  | Norwich (entraldistrict) | 6, 896 | 29, 247 |  | 1,263 | 37, 406 | 43,742 |
|  |  | 10,138 | 89,500 |  | 1,963 | ${ }^{101,601}$ | 101,601 |
|  | Verrington (town)* |  |  | 3,262 |  |  |  |
|  | Wallingford (town)* | 4,5:9 | 17\%.373 |  |  | $4{ }_{4} 9$ |  |
|  | Waterbury | 22, 624 |  |  | 1.977 | 177,137 | 3运, 137 |
|  | Windham (town)* | 4,529 | 35, 000 |  | 2,878 | 42, 407 | 42, 40\% |
|  | delaware. |  |  |  |  |  |  |
| 51 | Wilmington. | 20, 817 | 175, 040 | 695 | 23, 738 | 220,290 | 258, 005 |

* Statistics of 1898-99. a Includes balances brought forward, receipts from loans, etc.

TABLE 9.-Statistics of receipts of public schools of cities of over $\mathcal{E}, 000$ inhabitants in 1899-1900-Continued.


Table 90-Statistics of receipts of public schools of cities of over 8,000 inhabitants in 1899-1900-Continued.


* Statistics of 1898-99.

Table 9.-Statistics of receipts of public schools of cities of over 8,000 inhabitants in 1899-1900-Continued.


[^102]Tabliz 9.-Statistics of receipts of public schools of cities of over 8,000 inhabitants in 1899-1900-Continued.

|  | City. | Receipts for the school year 1899-1900. |  |  |  |  | $\begin{aligned} & \text { Amount } \\ & \text { arailable } \\ & \text { for use } \\ & \text { during } \\ & \text { thee } \\ & \text { year. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | From $\begin{gathered}\text { Stareap- } \\ \text { portion- } \\ \text { ment or } \\ \text { taxes. }\end{gathered}$ | From city appropri- ations or taxes. |  | Fromall sources | Total. |  |
|  | 1 | 2 | \% | 4 | 3 | 6 | 7 |
|  | massachusetts-continued. |  |  |  |  |  |  |
| 225 | Somerville |  | 8333,063 |  |  | \$333,038 | \$333, 668 |
| ${ }_{2}^{22} 2$ | Southbridge (town |  | 77,809 666.932 |  | \$1899 | - 28,239 | (30,612 |
| 228 | Taunton. |  | 152,000 |  | 2,177 | 154, 177 | 154, 177 |
| 229 | Wakefield (town) |  | 37, 235 |  | 1,007 | 3,232 08,306 | 38,332 |
| 231 | Waltham .-. |  | 96,306 |  |  | ${ }^{96,306}$ | 107, 306 |
| 232 | Watertown (town) |  | 40,500 |  |  | 40,534 | 40,534 |
| 233 | Westfield (town). |  | 48,675 |  | 6,334 | 55, 009 | 62, 055 |
| 235 | Weymouth (town) |  | 43, 328 |  |  | 44,101 | 44,101 |
| ${ }_{2}^{2}$ | Woburn ------. |  | 56, 770 |  | 440 | 57, 210 | 57,2010 |
|  | Worcester |  | 550, 00 |  | 2,7\%2 | 552,772 | 887,015 |
|  | michigan. |  |  |  |  |  |  |
| 238 | Adrian | 33,72\% | ${ }^{24}+343$ | \$605 | 1,327 | 30,002 | 32, 928 |
| 240 | Ann Arbor | 3,923 | 42, 678 | 1,273 | 6,068 | 53, 942 | 61, 994 |
| 241 | Battlecreek | 3,650 | 60,027 | 2,200 | 1,246 | 67, 123 | 67, 123 |
| 242 | Bay City | 13.815 | 76,035 |  |  | 90, 740 | 106, 343 |
|  | Detroit | 116, 8 , 81 | ${ }^{735,766}$ |  | 30,718 | 883,920 | 1,082, 54.358 |
| 245 | Flint | 4,427 | 51, 037 | 331 | 2,921 | 58,716 | 61, 459 |
| 246 | Grand Rapids | 38,720 | 248,319 |  | 41.136 | 398, 196 | 407, 5199 |
| 248 | Ironwood .... | 8, 4,029 | ${ }^{40} 5858$ | 109 | 3,556 | 457,443 | ${ }_{88}{ }^{54}, 033$ |
| 249 | Ishpeming. |  |  |  |  |  |  |
| 250 | Jackson. | 8,633 | 60,942 | 839 | 857 | 71, 271 | 74,034 |
| 25 | Kalamazoo |  | 78,125 | 70\% |  |  | 93, 685 |
| 253 | Lansing. | 6,624 | 57, 18 | 119 | 685 | 6-6,67 |  |
| 254 | Marquette* | 4,337 | 29, 112 |  | 4 | 33, 753 | 33, 971 |
| 20. | Menominee | 8,356 | 41, 041 |  | 595 | 49, 993 |  |
| 256 | Muskegon | 9, 795 | 44, 056 | 23,715 | 8,851 | 86, 117 | 117,387 |
| 28 | Owosso* | 3. 468 | \%, |  | 1,673 | 31, 427 | ${ }_{29,773}$ |
| 259 | Pontiac | 8,577 | 30,200 | 2,838 | 1,608 | 47, 375 | ¢1, 350 |
|  | Saginaw: |  |  |  |  |  |  |
| ${ }_{261}^{200}$ | East side. Westside | 11,875 | $\begin{aligned} & 84,530 \\ & 59,850 \end{aligned}$ | $\begin{aligned} & 83 \\ & i 9 \end{aligned}$ | 2,861 | -99,414 |  |
| 262 | Sault Ste. Marie | 3,294 | 37,631 |  |  | 40,975 | 64, 549 |
| 283 | Traverss city - | 3,0:1 | 30, 165 |  | 1,07\% | 34,313 | 42,313 |
| 264 | West Bay City .----- |  |  |  |  |  |  |
|  | minnesota. |  |  |  |  |  |  |
| 265 | Duluth* | 27,335 |  | 217, ¢3\% | 5,597 | 250, 827 | 430, 12 |
| 267 | Minneapolis |  |  |  |  |  | 1,003,512 |
| 268 | St. Cloud | 3, 72 | 25, 902 |  | 23 | 23, 897 | (20, 597 |
| 9 | St. Paul |  |  |  |  | 4\%, (04) | 6 |
| $2{ }_{21}^{20}$ | Stillwater* | $1 \begin{aligned} & 1,0.0 \\ & 1,25 \end{aligned}$ | 38.535 | 538 |  | 49, 131 | 1312, ${ }^{\text {512 }}$ |
|  | MSSISSIPPI. |  | 52, 213 | -,0,0 |  |  |  |
|  | Meridian | 5,800 | 14,000 |  | 350 | 20, 150 | 2s, 75 |
| ${ }^{273}$ | Natchez* |  |  |  |  | ${ }^{13.644}$ |  |
| 274 | Vieksburg |  |  |  |  | 25.493 |  |
|  | missouri. |  |  |  |  |  |  |
| 275 | Carthage |  |  |  |  | 36,600 43,423 | 41, 414 |
| 2276 | Hannibal | 8,317 |  | 35, 106 |  | 43, 423 | 41,691 |
| 27 | Jeferson Cit |  |  |  |  |  | 107\% 7 \% 9 |
| 279 | Kansas Ci | 69,710 |  | 561, 378 | 40,316 | 671.449 | 1,093,521 |
| 280 | Moberly |  |  | 11,181 |  | 26, 693 | 26.8.6 |
| 1 | St. Joseph | 1.50, 565 | 1,494,120 | 138.2. ${ }^{\text {a }}$ | 90, 95 | 87\%, 851 | 101 |
| 233 | Sedalia | 5, 744 |  | 45.271 | 771 | 51, 886 | 52, 143 |

Table 9.-Statistics of receipts of public schools of citics of over $\mathcal{S}, 000$ inhabitants in 1899-1900-Continued.


* Statistics of 1898-99.

Table 9.-Statistics of receipts of public schools of cities of over 8,000 inhabitants in 1899-1900-Continued.

*Statistics of 1838-£9.

Table 9.-Statistics of receipts of public schools of cities of over s,000 inhabitants in 1899-1900-Continued.

|  | City. | Receipts for the school year 1899-1900. |  |  |  |  | $\|$Amount <br> available <br> for use <br> dor <br> uring <br> the <br> year. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | From State ap portion- mento or taxes. | From city appropritaxes. | $\begin{aligned} & \text { From } \\ & \text { county } \\ & \text { and } \\ & \text { other } \\ & \text { taxes. } \end{aligned}$ | $\begin{gathered} \text { From all } \\ \text { other } \\ \text { sources. } \end{gathered}$ | Total. |  |
|  | 1 |  | 3 | 4 | § | 6 | $g$ |
|  | онio-continued. |  |  |  |  |  |  |
| 400 | East Liverpool | $\begin{aligned} & \$ 7,447 \\ & 4 \end{aligned}$ | $\$ 10,712$ |  | \$1,822 | \$49,981 | \$93, 937 |
| 401 | Elyria-*- |  |  | \$15 |  |  | - 6 6, 20.201 |
| 403 | Fremont | 3,563 | 24,992 |  | 340 | 28,895 | 29,548 |
| $40 \pm$ | Hamilton* | 13,016 6,24 | -61,611 |  | 155 | 79,049 82,112 | 100,902 44,349 |
| ${ }_{407}^{406}$ | Lancaster | 3,116 | 20, 208 |  | 469 | 23,993 | 2t, 259 |
| 408 | Lorain | 4,900 |  |  | 25 |  | 66, 586 61,188 |
| 409 | Mansfield | 6,160 | 62, 64 |  | 1,049 | 69,853 | 114, 818 |
| 411 | Marietta |  |  |  |  |  | ${ }^{56,132}$ |
| 412 | Massillon | 5,778 | 30,507 |  | 86 | 30,371 | 51,485 |
| 414 | Middletow | 7,275 |  |  | $6: 8$ |  | - 37,7898 |
| 415 | Piqua | 6,137 | 36, 8.21 | 959 |  | 43,912 | 56, 430 |
| ${ }_{417}^{416}$ | Portsmouth | 6,651 |  | 37, 654 |  | 43, 105 | 6, 6,55 |
| 418 | Springfield | 14,214 | 107, 33 | 33 | 529 | 129,490 | 133, 886 |
| 419 | Steubenville* | 6,893 | 30,099 |  | ${ }_{676}^{287}$ | ${ }^{37,188}$ | ${ }^{59,053}$ |
| 421 | Toledo | 53,053 | 377,899 | 2,569 |  | 433,501 | 519,694 |
| ${ }_{423}$ | Warren | 2.104 | 32,996 | 185 | 4,039 | 39, 324 | 74, 737 |
| 424 | Xenia | 3 3,308 | ${ }_{36,781}$ |  | 1,292 | 415,408 | ${ }^{31,986}$ |
| 485 | Youngstown | 17,380 | 159,802 |  | 20.5 | 170,387 | 235, 513 |
| 426 | Zanesville | 10,084 | 54,110 |  | 2,069 | 66,213 | 92, 707 |
|  | oklahoma. |  |  |  |  |  |  |
| $\begin{aligned} & 427 \\ & 4.0 . \end{aligned}$ | Guthrie .... Oklahoma City | 2,358 |  | 17\%,125 | 0,000 | 砢, 483 | 25,483 |
|  | oregon. |  |  |  |  |  |  |
| $\frac{499}{430}$ | Astoria <br> Purtiand. | $\begin{gathered} 3,858 \\ 30,549 \end{gathered}$ | $\begin{array}{r} 14,838 \\ 154,861 \end{array}$ | $\begin{gathered} 10,696 \\ 29,720 \end{gathered}$ | $804$ | $\begin{array}{r} 29,373 \\ 435,336 \end{array}$ | $\begin{array}{r} 29,373 \\ 436,7 \% 2 \pi \end{array}$ |
|  | pennsylivania. |  |  |  |  |  |  |
| 431 | Allegheny | 99, 864 |  |  |  | 570, 028 | 811, 12\%\% |
| ${ }_{433}$ | Altoona | - 26,391 | 95, 933 |  |  | 121,923 | \% |
| 434 | Beaver Falls | 8,891 | 22, 422 | 35 | 451 | 32, 399 | 32,399 |
| 445 | Braddock | 9,710 | 31,568 | 82 | 17,855 | 59,214 | 104, 419 |
| 437 | Brater | + ${ }_{9}^{12,643}$ | ${ }_{8}^{42}, 705$ |  | 923 | 39,471 | 53,990 |
| 438 | Carbondale ${ }^{\text {* }}$ | 11,663 | 35,367 |  |  |  | 47,032 |
| 439 | Carlisle |  | 18,930 |  | 376 | 2\%,145 | 61, 36\% |
| 440 | Chambersburg | - 26,414 | ${ }_{91}^{13,182}$ |  | 1,137 | ${ }_{121}^{2174}$ | 100, 413 |
| 412 | Columbia | 10,319 | 18,587 |  |  | 29,333 | 30, 153 |
| 443 | Danvile | 6,775 | 10, 776 | 29. | 537 | 17,882 |  |
| 445 | Dunmore | 9,435 |  | 7 |  | 32, 690 |  |
| 446 | Duquesne. | 5,204 | 29,305 |  | 1,314 | 36, 343 | 58,943 |
| 448 | Easton | 20, | 65, 249 | \%9 | 1, 28.9 | - 1987393 | ${ }_{219}^{140,891}$ |
| 449 | Harrisburg | 39,326 | 142, 735 |  | 1,869 | 188, 930 |  |
| 451 | Hazleton-- | 11, 733 | 29,097 |  | 1,109 | 41,944 | 45, 613 |
| 451 | Homestead | 9,32t | 35,103 |  |  | 17,863 | 77,863 |
| 40. | Johnstown | 25,215 | 95, 5 T? |  | 3, 880 | 12t,880 | 12.108 |
| 433 | Lancaster | 31, 800 | 82, 380 |  |  | 110,645 | 102, 309 |
| 455 | Mckeesport | 2\%,283 | 82, 592 |  | 3,348 | 152, 900 | 253, 275 |
| 456 | Mahanoy | 31,6.50 | 20, 197 |  | 03 | 32, 050 | 40,011 |
| 457 | Meadville | 9,231 | 30,474 |  | 1,905 | 41,610 | 42, 499 |
| 458 | Mount Carm | 9,484 | 18, 150 |  | 527 | 28, 161 | ${ }^{29,936}$ |
| 459 | Nanticoke | (0,658 | - | 2 | 3,523 |  |  |
| 461 | Norristown | 15,997 | 49,210 | 3,142 |  | 68,349 | 176,064 |
|  |  | * Sta | of 189 |  |  |  |  |

Table 9.-Statistics of receipts of public schools of cities of over 8,000 inhabitants in 1899-1900-Continued.


Table 9.-Statistics of receipts of public schools of cities of over 8,000 inhabitants in 1899-1900-Continued.

|  | City. | Receipts for the school year 1899-1900. |  |  |  |  | Amount available for use during the year. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | From State ap-portionment or taxes. | From city appropriations or taxes. | $\begin{aligned} & \text { From } \\ & \text { county } \\ & \text { and } \\ & \text { other } \\ & \text { taxes. } \end{aligned}$ | Fromall other sources. | Total. |  |
|  | II | 3 | 3 | 4 | 5 | 6 | 9 |
| $\begin{aligned} & 517 \\ & 518 \\ & 519 \\ & 520 \\ & 521 \end{aligned}$ | TEXAS-continued. |  |  |  |  |  |  |
|  | Paris. | \$41, 892 | \$63,293 | §9 | \$304 | \$105,501 |  |
|  | Sherman. | 8,398 | 19,400 |  |  | -27,798 | -49,298 |
|  | Tyler* | 7,600 | 8,060 | 500 |  | 16, 100 | 16,100 |
|  | Waco | 16,6:6 | 28,642 | 274 | 90 | 45, 63: | 50,432 |
| $\begin{aligned} & 522 \\ & 5: 3 \\ & \hline \end{aligned}$ | Ogden | 18,75\% | 53,358 | 3,165 | 2,465 | \% 77,745 | 77,889 |
|  | Salt Lake City | 52, 121 | 245, 957 |  | 3,178 | 301, 256 | 314,5\%1 |
| $\begin{aligned} & 524 \\ & 5.25 \\ & 526 \end{aligned}$ | Barre Vernont. | 1.720 | 32,343 |  |  |  |  |
|  | Burlington* | 2,055 | 47,000 |  | 4,044 | 53,099 | 35,698 |
|  | Rutland*.. | 1,655 | 35,000 | 1,255 | 1,007 | 38,917 | 29,123 |
|  | virginia. |  |  |  |  |  |  |
| 527528529530531532533534535536 | Alexandria | 6,958 | 13,500 |  | 89 | 20,540 | 20, 240 |
|  | Lyanchburg* | 10,244 | 25,996 |  | 2,182 |  | 28, 38.2 |
|  | Manchester* |  | 7,373 |  |  |  | 12,639 |
|  | Newport News | 2,814 | 11,690 |  | 11,855 | 26, 3a99 | 27, \%99 |
|  | Petersbur | 11,069 | 11.678 |  | \%-90 | 10, | 1100,213 |
|  | Portsmouth | 6,197 | 27,516 |  |  | 35, 713 | 35, 2\%3 |
|  | Richmond | 34, 552 | 125, 389 |  | 3,044 | 162, 985 | 163,919 |
|  | Roanoke | 6,534 | 26,580 | 184 |  | 33, 238 | 33, 298 |
|  | Washington. |  |  |  |  |  |  |
| $\begin{aligned} & 537 \\ & 538 \\ & 539 \\ & 540 \end{aligned}$ | Seattle | 82,405 |  | 240,509 | 6,539 | 329,453 | 346, $80 \%$ |
|  | Spokane | 59,159 | ----- | 167, 680 | 2,421 | 229,250 | 242, 337 |
|  | Walla Walia | 29,745 | 18,147 | 14, $\sim 1$ | 2,000 | 1619,892 | -6, 999 |
|  | WESt virginia. |  |  |  |  |  |  |
| $\begin{aligned} & 541 \\ & 542 \\ & 543 \\ & 544 \end{aligned}$ | Charleston. | 4,023 | 48,559 |  | 3,65\% | 56,239 | 57,345 |
|  | Huntington <br> Parkersburg | 3,847 | 48,509 | 28,347 | 3, 8205 | 36, 0\%0 | 38, 019 |
|  | Wheeling .-. | 14,731 | 97,398 |  | 4,427 | 116,556 | 143,667 |
|  | Wisconisin. |  |  |  |  |  |  |
| 545 | Appleton | 5,8ั5 | 52,190 | 6, 407 | 3,198 | 67, 650 | 90, 2500 |
| 546 | Ashland | 4,232 | 42,373 | 3, 731 | 835 | 51, 171 | 56, 993 |
| 548 | Beloit | 4,002 | 32,776 | 3, 329 | 1,052 | 40,959 | 42, 887 |
| 549 | Eau Claire.. | 9, 1 , 12 | 55,340 | 7,085 | 535 | T2, 133 | 65.547 |
| 550 | Fond du Lac | 7,294 | 28,000 | 5,404 | 1,282 | 41,980 | 52,149 |
| 551 | Green Bay | 6,927 | 38, 880 | 6,595 | 5,355 | 57,658 | 57,638 |
| 552 | Janesville | 4,720 | 28,000 | 4,565 | 1. 746 | 33, 031 | 39,997 |
| 553 | Kenosha | 4,305 | 27,889 | 4,009 | 2,398 | 38,592 | 50, 704 |
| 554 | La Crosse | 11,163 | 75, 000 | 10,952 | 3,338 | 100, 556 | 133, 958 |
| 550 | Madison | 5,938 | 42,189 | 5,640 | 3,574 | 57, 341 | 61,514 |
| 556 | Manitowoc | 4, 237 | 32,493 | 19,040 |  | 55, 7.0 | 57, 890 |
| 657 | Marinette | 6,074 | 27, 400 | 5,799 | 1,920 | 41,193 | 41,354 |
| 998 | Merrill | 3,476 | 10,650 | 6,000 | 545 | 20,671 | 20,671 |
| ${ }^{5} 50$ | Milwauk | 100, 127 | 475.000 | 101, 000 | 10, 166 | 632, 293 | 1,006, 463 |
| 560 | Oshkosh | 11, 664 | 66,540 |  | 274 | 78,478 | 97,342 |
| 561 | Racine | 10,489 | 35, 60 | 40,000 | 1,660 | 87, 49 | 160, 819 |
| 56 | Sheboygan | 9,035 | 64,975 | 9,269 | 1,030 | 84,360 | 150, 837 |
| 564 | Stevens Point | 1,212 |  | 21,700 | 8,648 | 31,560 | 3\%, 132 |
| ${ }_{566}^{565}$ | Watertow | 4,268 | 15, 681 | 4,050 | 1,138 | 25, $13 \%$ | 32, 182 |
|  | Wausaw. | 6,497 | 38,000 | 4,567 | $61 \%$ | 49,681 | 60,9\%1 |
|  | w Yoming. |  |  |  |  |  |  |
| 567 | Cheyenne.. | 4,089 | 25, 231 | 108 |  | 29,428 | 29,431 |
| 568 | Laramie -... |  |  |  |  |  |  |

Table 10.-Statistics of expenditures of public schools of cities of over 8,000 inhabitants in 1899-1900.

*Statistics of 1898-99.

Table 10.-Statistics of expenditures of public schools of cities of over \&,000 inhabitants in 1899-1900—Continued.

|  |  | Expe | enditures ff | or the schod | year 1899- |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | City. | $\|$Perma- <br> nent in- <br> vestments <br> and asstivg <br> improve- <br> iments. <br> ments. | Teaching and supervision | $\begin{gathered} \text { Current } \\ \text { and inci- } \\ \text { dental ex- } \\ \text { penses. } \end{gathered}$ | $\underset{\text { Evening }}{\text { schools. }}$ | Total. |
|  | 1 |  | 8 | 4 | § | 6 |
|  | florida. |  |  |  |  |  |
| $\begin{aligned} & 53 \\ & 53 \\ & 5 k \\ & 55 \\ & 56 \end{aligned}$ | Jacksonville <br> Key West <br> Pensacola <br> Tampa | $\begin{gathered} 11,245 \\ 21,200 \\ 2,880 \end{gathered}$ | $\begin{array}{r} \$ 48,416 \\ 9+4148 \\ 1,467 \\ 14,305 \end{array}$ | $\begin{array}{r} 87,433 \\ 1,434 \\ 3,500 \\ 3,509 \\ 2,629 \end{array}$ |  | $\begin{aligned} & \$ 57,157 \\ & 13,2047 \\ & 18,847 \\ & 10,334 \\ & 10,34 \end{aligned}$ |
|  | ceorcia. |  |  |  |  |  |
| $5 \%$ | Athens | $1{ }^{10}$ | 17,364 | 1,467 |  | 18,881 |
| 59 | Augusta | 8,465 | 71, 936 | 13,657 |  | $99+057$ |
| 60 61 | Branswick | 1,117 | 10,483 | 1,401 | 5 | 13,009 |
| $6{ }_{62}$ | Macon (Bibb County) | \%, $6,3,2$ | -26, 6075 | 8,853 | \$36 | 88, 859 |
| 63 | Savamnah ............ | 9,844 | 98,518 | 8,835 |  | 117,187 |
|  | illinots. |  |  |  |  |  |
| 64 | Alton | 11,804 | 21,003 | 7,3:8 |  | 10,218 |
|  | Aurora: ${ }_{\text {District }}$ No. 4 (west) |  |  |  |  |  |
|  | District No.b (east) | 4,010 | 39, 110 | 11, 1010 |  |  |
| ${ }_{68}^{67}$ | Belleville -.... |  | 36, 364 | - ${ }_{20,159}$ |  | 49,718 104.413 |
| 69 | Cairo | 2,317 | 19,093 | 8,565 |  | 29,978 |
| 71 | Champaigu | 3,180 705,24 |  | 1, ${ }^{8,32 \%} 75$ | (3), 826 | \% $\begin{array}{r}28,013 \\ 7,074,865\end{array}$ |
| 72 | Danvile | 20, 3196 | 32, 405 | 1, 11, 563 |  | 67, 364 |
| 73 | Decatur -...-. | 9,417 | 49,843 | 13, 489 |  | 72, 754 |
|  | East St. Louis: |  | 34, 519 |  |  | \%5,205 |
|  | District No.2(T. 2 N., R. 9 W). |  |  |  |  |  |
| 76 | District No.2(T.2N., R. 10 W.$)$ |  | 2,800 | 909 |  | 3,700 |
|  | Elgin --... | 33,404 |  | 21,935 |  |  |
| 78 | District No. 1 .-.............. | 6,447 | 38,422 | 21, 817 |  | 65,683 |
| 79 | District No. 2 (South Eranston) | 4,008 | :0, 012 | 10, 5 \% 0 |  | 34,760 |
| 80 | District No. 3 (North Evans- |  |  |  |  |  |
|  | ton) | 1,607 | 5,136 | 1,955 |  | 8, ${ }_{8}$ |
| $\begin{aligned} & 81 \\ & 80 \\ & 802 \end{aligned}$ | Freeport Galesburg | 13,275 | 42,992 | 11,874 |  | 71, 141 |
| 83 | Jacksouvill |  | 32, 115 | 8,56 |  | 41,575 |
| 85 | Johiet-...- | 25, 1,994 | ${ }_{20}^{50,202}$ | \% ${ }_{\text {c/ } 621}$ |  | 30, 117 |
| 86 | Kewanee | 12,000 | 19,800 | 5,269 |  | 37, 050 |
| 87 | La Salle | 18,000 | 15,4.0 | 3,200 |  | 36, 680 |
| 88 | Mattoon | 51,939 | 16,525 | 6,456 | 1,00 | 74, 5 \% |
| 90 | Moline | 28,236 | 48,935 | 16,265 |  | ${ }^{93,435}$ |
| 91 | Ottawa. | 1,213 | 22,588 | 6, 3 29 |  | 30, 130 |
| 93 | Peorin. | 56,180 | 139,59 | 51.474 |  |  |
| $9 t$ | Quincy | 5,245 | 57, 504 | 21,45t | 309 | 84,543 |
| ${ }_{96}^{95}$ | Rockford | 35, 412 | 70, 727 | \%2\% |  | 193, 760 |
| ${ }_{97}^{96}$ | Sock Isfand | 15, 304 | 75,515 | 24,627 |  | 116,596 |
| 98 | streator. |  | 26,314 | 9,485 |  | 35, 800 |
| 99 | Waukegan |  |  |  |  |  |
|  | indiana. |  |  |  |  |  |
| 100 | Anderson | 3,749 | 45,882 | 13, 608 |  | 63, 239 |
| 101 | Columbus |  |  |  |  | 60.493 |
| 103 | Elkhart | 22,17 | 33,80, | ,918 |  | 60,492 |
| 104 | Evansville | 18,283 | 1.8,490 | a48,803 |  | 195,580 |
| 105 | Fort Wayne | 15,2:26 | 81, 116 |  |  | 122, 835 |
| 106 | Hammond. | 5, 219 | 24, 4 32 | 13,956 |  | ${ }_{41,208}^{41,09}$ |
| 108 | Huntingtol | 119.118 | 421,475 | 215, 591 | 1,363 | 757, 147 |
| 103 | Jeffersonville | 600 | 22,515 | 6,580 |  | 29,695 |

$a$ Includes salary of superintendent.

Table 10.-Statistics of expenditures of public schools of citics of over s,000 inhabitants in 1899-1900-Continued.

|  |  | Expe | enditures f | or the scho | jear 1899- |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | City. | Perma- <br> nent in- <br> restments <br> andlasting <br> improrore. <br> iments. <br> ments. | Teaching and super vision. | $\begin{gathered} \text { Current } \\ \text { and inci- } \\ \text { dental ex- } \\ \text { penses. } \end{gathered}$ | Evening schools. | Total. |
|  | 1 | \% | 3 | 4 | ฐ | ${ }^{6}$ |
|  | indiana-continued. |  |  |  |  |  |
| 110 | Kokomo | 8406 | 826,545 | S11,51 |  | \$ 88,522 |
| 112 | Logansport | - | 32,010 | 11. 1.510 |  | 81,550 49,300 |
| 113 | Marion - - | 6,517 | 39, 165 | 11, 470 |  | 5i\%,152 |
| 115 | Mruncie* | 29,413 | 43,129 | $12,82{ }^{2}$ |  | 85, 569 |
| 1116 | New Albany | 2.513 | 86, 390 | 8, 203 |  | 4i, 996 |
| 118 | Richmorid |  | 49,120 | 14,588 |  | 63,728 |
| 119 | South Bend |  |  |  |  |  |
| ${ }_{121}^{120}$ | Terre Haute | 2. ${ }_{4}$ (155) | 103,354 19,297 | 34,111 $9,2 \times 21$ | \$500 | 139,520 3354 |
| 129 | Wabash .-. | 20,009 | 21,880 | 2, 72 |  | ${ }_{43,582}$ |
| 123 | Washington-- | 3,000 |  |  |  |  |
|  | Iow |  |  |  |  |  |
| 12 | Boone |  | 23, 600 | 13,000 |  | 36, 000 |
| 126 | Cedar Rapids | 19,10\% | 61, 6\%0 | 23,52 |  | 10Ti. 359 |
| 1 12, | Clinton- | 9.407 | 41,230 | 2, 20 | (1) | \%.7.74 |
| 123 | Davenport - | \%0,2i6 | 911.641 | 30, 84 |  | 192, 765 |
| 130 | Des Moines: | 600 |  |  |  |  |
| 131 | East side -- |  | 45.603 | 19,336 |  | 64, 039 |
| 132 | West side | 2.402 | 83, 040 | 4. ${ }^{2} .505$ |  | 127,967 |
| 134 | Furt Dodge | 14, 113 | 18,6\%1 | 10,493 |  | 43,977 |
| 135 | Fort Madison | ${ }^{33}$ | 14,101 | 14,695 |  | 23,594 |
| 137 | Marshalitown | 6, 7 5i | 30,116 | 13, 3 雼 |  | $50.2{ }^{\text {a }}$ \% |
| 138 | Muscatine.. |  | 31,901 | 16,667 |  | 48,563 |
| 139 | Oskaloosa | 5,948 | 25, 110 | 7,549 |  |  |
| 141 | Otumwa | 5,000 | 4,7,108 | 48, 8180 |  | 131,2, |
| 142 | Waterloo. | 100 | 12,000 | 4, fi0) |  | 16, 100 |
| 143 | Waterloo, East side | 5,050 | 17,911 | 5,845 |  | 28,806 |
|  | kansas. |  |  |  |  |  |
| 144 | Atchison | 2,400 | 19, 504 | ${ }^{8,95 \%}$ |  |  |
| 116 | Fort Scott |  | 20, 150 | $\bigcirc, 500$ |  | 2T, 650 |
| 146 | Galena --. |  | \% 180 |  |  |  |
| 149 | Kansas City |  |  |  |  |  |
|  | Lawrence . | , 37 | 2,9\%5 | 5,369 |  | 20, 701 |
| 151 | Leavenworth | $50 \%$ | 39, 249 | 13, 829 |  | 53,585 |
| 15 | Pittsburg |  | 16,789 | 9,334 |  | 23, 883 |
| $15 \pm$ | Wichita .- | 39,17. | ${ }_{43,887}$ | 23, 214 |  | $\begin{gathered} 163,633 \\ 68,036 \\ 683 \end{gathered}$ |
|  | kemtucky. |  |  |  |  |  |
|  | Bowling Green |  |  |  |  |  |
| 156 | Covington-- | 1,087 | 71,636 | 19,703 |  | 92, 426 |
| $15 \%$ | White schools | 906 | 10,181 |  |  |  |
| 158 | Colored schools |  | 3. 565 |  |  | 4. 109 |
| 159 | Henderson* | 14,000 | - | 14,811 |  | ${ }_{666.637}$ |
| 101 | Louisville | 118.018 | 3960.092 | 92, 687 |  | 608, 774 |
| ${ }_{1}^{163}$ | Newport. | 3, 499 | 37,452 | 6,216 |  | ${ }^{47,347}$ |
| 160 | Paducah. | - 20,100 | 35, 410 | 1, 000 |  | 34, 56,060 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 166 | Baton Rouge |  |  | 255.93 |  |  |
| 167 | Shre veport. |  | 12,000 | 210,033 |  | 15,000 |

*Statistics of 1898-99. a Includes salaries of clerks and janitors.

Table 10.-Statistics of expenditures of public schools of cities of over 8,000 inhabitants in 1899-1900-Continued.


[^103]Table 10.-Statistics of expenditures of public schools of cities of over s,000 inhabitants in 1899-1900-Continued.


* Statistics of 1898-99.

Table 10.-Statistics of expenditures of public schools of cities of over $s, 000$ inhabitants in 1899-1900-Continued.


* Statistics of 1898-99.

TABLE 10.-Siatistics of expenditures of public schools of cities of over $\mathcal{S}, 000$ inhabitants in 1899-1900-Continued.

|  | City. | Expenditures for the school year 1899-1900. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Permanent investments and lasting improvements. | Teaching and supervision. | Current and incidental expenses. | Evening schools. | Total. |
|  | 1 | 8 | : ${ }^{\text {d }}$ | 4 | 5 | 6 |
|  | NEW YORK-continued. |  |  |  |  |  |
| $31 \%$ | Johustown | \$8, 843 | \$21,694 | \$5, 408 | ---------- | \$35,945 |
| 348 | Kingston: <br> Kingston school district. | 4,664 | 29,003 | 17,469 |  | 51,196 |
| 349 | District No. 1 .......-..... |  |  |  |  |  |
| 350 | District No. 2 |  |  |  |  |  |
| 331 | District No. 3 |  | 7,955 | 535 | -----. | 8,490 |
| 353 | District No. 4 |  | 4,925 | 1,771 | -----. | 6,696 |
| 353 | Lansingburg --- | 720 | 31,274 | 13,847 |  | 44, 811 |
| 354 | little Halls. | 32, 327 | 18,643 | 5,5\%8 |  | 56, 498 |
| 355 | Lockport | 1,000 | 38, 973 | 16,828 |  | 55, 801 |
| 350 | Midaletown | 7,148 | 28,967 | 13, 348 |  | 49, 403 |
| 357 | Mount Vernon | 49,164 | 66,428 | 40,718 | \$2\% 9 | 156, 789 |
| 358 | Newburg.-... | 17,572 | 57, 398 | 16,150 | 581 | 91, 120 |
| 359 | New Rochello | 3,596 | 51,399 | 41, 495 | - 584 | 97,004 |
| 360 | New York...- | 5, 432, 969 | 10, 733, 918 | 3, 642,069 | 234, 789 | 20, 092, 745 |
| 361 | Niagrara Falls... | 5,288 | 41, 390 | 19,839 | 440 | 67, 557 |
| $36 \%$ | North Tonawand | 16,285 | 25, 578 | 13,458 |  | 51, 3 \%1 |
| 363 | Ogdensburg | 4,096 | 21,468 | 10,484 | ---------- | 36,048 |
| 364 | Olean* --... | 1,678 | 27, 791 | 19, 137 |  | 48, 606 |
| 365 | Oswego *------------------- | 6,634 | 38,942 | 12, 430 | --------... | 58, 056 |
| $3 \mathrm{C6}$ | Peekskill: District No. $\%$ (Drum Hill) | 2,540 | 10,231 | 6,286 |  | 19,1557 |
| 367 | District No. 8 (Oakside)... |  | 8,000 | 2,000 | --- --- | 111, 100 |
| 368 | Plattsburg | 13,129 | 21,295 | 10, 766 | ---- | 45, 190 |
| 369 | Port Jervis | 5,852 | 2', 950 | 9,931 |  | 38,736 |
| 370 | Poughkeepsie |  | 4:3, 000 | 34, 384 |  | 77, 384 |
| 371 | Rochester | 124,936 | 421, 451 | 115, 289 | 4,395 | (666, 074 |
| ${ }^{372}$ | Rome .... | 6,325 | 23,635 | 6,100 |  | 36, 060 |
| 373 | Saratoga Springs | 4,300 | 32, 501 | 11, 401 | 400 | 48, 602 |
| 374 | Schenectady .-.. | 12,874 | 41,996 | 10,774 |  | 65, 644 |
| 375 | Syracuse | 4,168 | 286, 315 | 109, \% | 2,981 | 402, 714 |
| 376 | Troy. | 2,851 | 131,898 | 15,545 |  | 150,294 |
| 377 | Utica | -77,887 | 125, 929 | 41,391 | 911 | 246,118 |
| 378 | Watertown | 24,661 | 49,307 | 13, 119 | 600 | 87, 687 |
| 379 | Watervliet | 11,276 | 19,285 | 7,013 |  | 37, 634 |
| 380 | Yonkers | 68,720 | 127,981 | 76,45土 | 4,211 | 277,376 |
|  | NORTH CAROLINA. |  |  |  |  |  |
| 381 | Asheville. | 530 | 15, \%05 | 7,953 |  | 24, 191 |
| 38.2 | Charlotte .- |  |  |  |  |  |
| 38.3 | Greensboro | 300 | 12, 103 | 1,000 |  | 13,401 |
| 384 | Newbern | 515 | 5,760 | $4 \cup 5$ |  | 6,690 |
| 385 | Raleigh_... |  |  |  |  |  |
| 380 | Wilmington. |  |  |  |  |  |
| $38 \%$ | Winston.--- |  |  |  |  |  |
|  | NORTH DAKOTA. |  |  |  |  |  |
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| 589 | Akron | 7,650 | 90,889 | 46,554 | 1,592 | 146, 685 |
| 390 | Alliance |  | 19,560 | 7,20\% |  | 26, 76\% |
| 391 | Ashtabula | 1,899 | 15216 | 7, 607 |  | 24, 72\% |
| $39 \%$ | Bellaire |  | 15,966 | 7,668 |  | 23, 634 |
| 393 | Cambildge |  | 15,205 | 8, 62: |  | 23, 887 |
| 391 | Canton -- | 25.052 | 76, 340 | 39,416 |  | 140, 808 |
| 395 | Chillicothe | 1,673 | 33,998 | 8,200 |  | 43, 871 |
| 356 | Cincinnati* | 2\%, 240 | \%90, 342 | 143, 686 | 5,518 | 961,786 |
| 397 | Cleveland | 339, 131 | 998,998 | 272, 794 | 6,481 | 1,545,407 |
| 398 | Columbus | 75.08\% | 308,528 | 113, 969 |  | 497, 3 \% |
| 399 | Dayton | 41,905 | 243, 475 | 80,633 | 686 | 366, 699 |
| 400 | East Liverpool | 19,005 | 25, 321 | 23, 686 |  | 68, 112 |
| 401 | Elyria .....-. | 12,773 | 19, 144 | 4,347 | ---.-.-.-. | 36,264 |
| 402 | Findlay* |  | 31,525 |  |  | 55, 237 |
| 408 | Fremont |  | 18,261 | 8,617 |  | 26, 878 |
| 404 | Hamilton* | 5, 30: | 46, $1 \sim_{2}$ | 14.588 | - | 65, 012 |
| 405 | Ironton * |  | 21,639 | 6,304 | ------ | 28,243 |

[^104]Table 10.-Statistics of expenditures of public schools of cities of over 8,000 inhabitants in 1899-1900-Continued.


Table 10.-Statistics of expenditures of public schools of cities of over 8,000 inhabitants in 1899-1900-Continued.


* Statistics of 1898-99.

Table 10.-Statistics of expenditures of public schools of cities of over 8,000 inhabitants in 1890-1900.-Continued.


[^105]Table 11．－School statistics of cities and villages containing betreen 4，000 and 8，000 inhabitants．

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TABLE 11.-School slatisites of cities and villages containing between 4,000 and $s, 000$ in7abitants-Continued.


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Table 11.-School statistics of cities and villages containing between 4,000 and $\mathcal{S}, 000$ inhabitants-Continued.


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## CHAPTER XXXV.

## INSTYUTIONS FOR IIGHER EDUCATION.

CIIANGES IN INSTITUTIONS.

Georgia Female Seminary, Gainesville, Ga.-Name changed to Brenar College. Chaddock College, Quincy, In.-Changed to Boys' Industrial School.
Oswego College for Young Ladies, Oswego, Kans. -Closed.
Keatchie College, Keatchie, La.-Changed to Louisiana Female College.
Minden Female College, Minden, La.-Closed.
Hamilton College, Watervalley, Miss.-Closed.
Northwest Missouri College, Albany, Mo.-Changed to Central Academy.
College of Montana, Deerlodge, Mont.-Closed.
Lafayette Seminary, Lafayette, Oreg.-Removed to Dallas, Oreg., and name changed to Dallas College.

Portland University, University Park, Oreg.-Conso?idated with Willamette University, Salem, Oreg.

Black Hills College, Hot Springs, S. Dak_-Closed.
Nashville College for Young Ladies, Nashvilla, Tenn.-Closed.
Norfolk College for Young Ladies, Norfolk, Va.-Closed.
Colfax College, Colfax, Wash.-Closed.

## Changes in courses of study.

Athens (Ala.) Female College.-The course has been raised at least one year.
Southern University, Greensboro, Ala.-Requirements for admission to col.ege classes raised to the amount of nearly a year"s work.

University of Alabama.-Pedagogy has been added and options have been extended so that now students in college courses have practically free choice above sophomore year.

Central Baptist College, Conway, Ark.-The courses in French and German have each been changed from a two years' to a three years" course.

Hendrix College, Comway, Ark.-Master's degree will no longer be conferred. The college will devote its energies solely to undergraduate work.

University of Arkansas.-Department of elocztion and physical culture (for girls mainly) has been organized.
California College, Oakland, C'al.-Henceforth to be a college only and strictly. After next year it will confer degrees of associate of arts and associate of letters for two years' course, demanding very high entrance requirements.

Trinity College, Hartford, Conn.-Established a complete department of natural history and appointed a professor and assistants in natural history.

Yale University, New Haven, Conn.-The following statement, taken from the Yale Alumni Weekly for February 6, 1901, shows the changes recently made in the curriculum of the academical department:

As a result of long and careful discnssion by the academic facnlty, the following changes in the college curriculum have been sanctioned by the corporation at their
meting on January 20, 1901. They are embodied in the following general rules, which will go into effect with the beginning of the next academic year:

1. A candidate for the degree of bachelor of arts must successfully complete courses aggregating 60 hours fer week through a year, but under the following conditions:
II. Freshmen shall take 15 hours per week, sophomores and juniors from 1.5 to 18 hours, seniors at least 12 hours.
(a) A student will be enrolled in the freshman class until he has completed at least 12 hours of work; he will then be enrolled in the sophomore class until he has completed at least 20 hours, including all requirements of freshman year; then in the junior class until he has completed at least 41 hours; then in the senior class until he has completed 60 hours.
(b) A student who is enrolled as freshman a second year may, if he desires, tale 18 hours.
(c) A student in any of the three upper classes who desires to anticipate a course of the class in which he is enrolled by passing a special examination in it at the beginning of the year must apply to the dean, in writing, not later than September 1 , for such an examination. The privilege is not open to those who have deficiencies due to failure in courses previously taken.

A course thus anticipated may, with the consent of the faculty, be counted as part of the requisite 60 hours. In its place the student may take an equal number of hours from the courses open to his own or to the next higher class, if he is otherwise qualified to do so. The course or courses chosen in place of the one anticipated must be stated in the application for the special examination.

Members of the incoming class desiring to avail themselves of this privilege must apply to the freshman committee, which is given power to carry these provisions into effect.
III. Each student must complete or offer the equivalent of connected courses of Grades A, B, and C, aggregating at least 7 hours, in one of the following three departments of study, and connected courses of Grades A and B, aggregating at least 5 hours, in each of the two other departments:

1. Languages and literature.
2. Mathematics and natural science.
3. Mental, historical, and political science.
IV. Each student must, in his freshman year, complete or offer the equivalent of courses in English, Greek, Latin, and mathematics, and in either French or German, aggregating $3 \times 5=15$ hours per week.
V. English A, Greek A, Latin A, and mathematics A must be taken not later than freshman year.

French A and German A not later than sophomore year.
History A not later than junior year.
Mental science not earlier than sophomore year.
Political science not earlier than junior year.
These rules are necessarily expressed in concise and technical language, and call for a general exp'anation, which is furnished by a member of the faculty.

Hereafter, the requirements for the bachelor's degree are divided under three heads:

First. Requirement as to quality of work.
Second. Requirement as to quantity of work.
Third. Requirement as to specific courses to be taken.
First. Requirement as to quality of work. In view of the growing range of subjects of study open to students, the danger of their dissipating their energies among a number of elementary courses, and of their not following a consistent plan in the selection of their worls, has led to the adoption of a general rule which requires a high attainment in the pursuit of one line of work, and a less attainment in the pursuit of two other different lines of work.

For this purpose most of the important studits have been grouped under three departments:
$\bar{I}$. Languages and literature, which includes the ancient languages, the modern languages, and English.
II. Mathematics and the natural sciences, namely, physics, chemistry, physiology, botany, geology, and mineralogy.
III. The mental, historical, and political sciences.

Within each of these three departments the courses are arranged in successive grades, corresponding with the successive grade of advancement in the pursuit of that line; for instance, freshman mathematics is Grade A, sophomore mathematics is Grade B, and the present advanced elective courses in mathematics are Grade C. Sophomore mediæval history is Grade A; junior American history, Grade B, and senior European history is Grade C.

In the case of each course of study, the other course or courses which it presupposes are indicated. So, for instance, elementary physics presupposes freshman mathematics and itself is introductory to laboratory physics; elementary physiology presupposes the inorganic chemistry course, and is introductory to the course in biology; the large junior course in elementary economics must precede those in money, banking, and industrial history, and these open the way to more advanced courses. A student is required to have completed courses of the first, second, and third grade in one of these three general departments, and courses of the first and second grade in each of the other two, following the sequence of courses as far as that will be indicated. In the case of some courses, their sequence will not be laid down, and they will stand loy themselves. Other courses will not be grouped wnder any of the three general departments, such as those in Biolical literature, art, and music.

On the one hand, this rule will call for a certain degree of specialization on the part of each student, he being compelled to acquire a considerable degree of proficiency along a connected line of study. On the other hand, too great specialization will be prevented by the requirement that he also devote considerable time to two other ines of study not directly connected with his major courses.

The rule is aimed, then, at correcting the tendency on the part of some men to spread their work too much and scatter their energies in a variety of elementary courses, and also at that small class of men who devote all their energies exclusively to one line of study. The first class of stadents are the ones who, under the present arrangement, are in danger of not getting enough out of their college course; the other class of getting, so to speak, too much, in that they become fully equipped in one line to the exclusion of sufficient knowledge of other subjects.

When the prospectus of courses for 1901-1902 appears, it will arrange all the courses of study under these three grades and indicate the years when the first grade may be begun. So, for instance, languages and literature will, as heretofore, form the bulk of the work of the freshman year. The natural sciences may bo begun in the sophomore year. Historical and philosophical studies may also be begun by sophomores, and political science, as heretofore, by juniors. The above quality requirement puts the emphasis upon the progressive character of the work done, not upon the amount of information accumulated by the student. It aims to educate him by developing his powers of reasoning and observation, instead of filling his mind with a mass of unrelated, though perhaps valuable, facts.

Second. Requirement as to quantity of work. The unit of computation is an hour per week in the class room during one year. A candidate for the degree of bachelor of arts must have completed sixty of these hours, which he will naturally distribute among the four years of his college course.

He will take 15 hours in freshman year, which will be devoteu to five courses of 3 hours each, in mathematics, Latin, Greek, English, and in either French or German. A sophomore will choose between 15 and 18 hours of class-room work, taking five or six courses of 3 hours each, from among twelve offered him, in continuation of his freshman courses, and in physics, chemisiry, history, sud inental science. A junior will take from 15 to 18 hours a week of class-room work, choosing from a wide range of courses, either in continuation of his freshman and sophomore studies, or in beginning political science, or in the minor subjects of study, such as art, music, Biblical literature, etc. A senior will choose from 12 to 19 hours from a still wider range of courses. * * \%

Heretofore a number of men have been admitted to the freskman class who were especially well prepared in some subjects and quite able to omit the course in those subjects offered to their class, and pass on at once to the advanced course in the subjects offered to sophomores. Under the new plan, these men would bo encouraged to at once anticipate that part of their freshman year's work by an examination, getting credit for so many hours toward the total of sixty, and be admitted at once to an advanced course, for instance, in one of the modern languages or in mathomatics. Another small class of men come to college well prepared and able and willing to do more than the successive woriz of each class calls for, with a view of attaining their degree in less than four years. Under the new plan, these men are encouraged to anticipate a part of their freshman year work at once and enough of the work of later years, during subsequent summer vacations, to enable them to complete the 60 hours within three years. This class of men is necessarily small, but made up of mature and earnest students to whom it is a matter of serious importance to complete their course in less than the four years.

Heretofore the requirement as to specific courses to be taken has been the central one in the curriculum. In fact, as is well known, up to 1884 practically all the curriculum was̃ made up of so-called "reguired" courses. In that year one-
third of the work of the college course was made elective, the choice being limited to a small range of subjects. The fraction bas grown by the dropping of natural science in 1894, and of mental and moral science in this year, and by the changes in sophomore year made a few years ago, anounting to the introdnction of a limited choice of courses. The required courses that remain under the new curri ulum are, as said above, exclusively those of the freshman year, the requirement now corering only one-year courses in Greek, Latin, English, mathematics, and in either German or French.

In the Sheffield Scientific School a course in sanitary engineering and a course in studies preparatory to the study of forestry have been established.

The Yale Forest School was established during the year and has an endowment of $\$ 150,000$ given by Mr. James W. Pinchot and his family.
St. John's College, Washington, D.C.- IIenceforth the classical course will be eliminated from the curricnium: modern languages will be substituted and the scientific and commercial courses will be enhanced. Our own language with its literature will receive very special attention. The aim is to make it an English science school with a good busineas course.

Florida Agricultural College, Lake City, Fla.-Provision has been made for a classical course of study.
St. Leo (Fla.) Military College.-Spanish has been made obligatory in the commercial course.

Seminary West of the Suwanee River, Tallahassee. Fla.-Two years of Spanish and two years of Italian introduced into the curriculum. Four years in Greek and six jears in Latin required for A. B. degree. Electives in senior class. A department for teachers was inaugurated last year. .
Atlanta ( $G a_{0}$ ) University.-The former subnormal class has been dropped, leaving no regular work of grammar school type. An English high school course of three years has been added.
North Georgia Agricultural College, Dahlonega, Ga.-The entrance requ rements have been made to conform to those of the College Association of Georgia.
La Grange (Ga.) Female College.-The course of study has been changed so as to conform to the course adopted by the New England Association of Colleges, to go into full effect in 1801-1802. This is by order of the board of education of the Methodist Episcopal Church South.
Mercer University, Hacon, Ga.-Elective studies allowed in junior and senior years.
Emory College, Oxford, Gc.-Elective studies allowed in junior and senior years.
Eving (Ill.) College.-The classical and scientific courses have been rearranged and strengthened. More attention will be given hereafter to political science.
Knor College, Galcsburg, Ill.-The courses of study have been changed to the group system.
McKendree College, Lebanon, Ill.-The required mathematics ends with trigonometry at the close of freshman year.
Rockford (Ill.) College.-Introduction of courses in Spanish, hygiene, and domestic science. For the coming year new courses are offered in bacteriology, pedagogy, and geology.

Union Christian College, Herom, Ind.-The curriculum has been strengthened and electives added in the junior and senior years.
Henry Kendall College, Muscogee, Ind. T.-Normal and business courses have been added.
State University of Iowa, Iowa City, Iowa.-The following additions to courses are to take effect in 1900-1901: Greek art and archæology and Sanskrit added to courses in Greek; several courses in Scandinavian languages and literature alded to courses in German; lectures on journalism and bookmaking added to English; a full course in public speaking.

Graceland College, Lamoni, Iowa.-The scientific course has been displaced by a philosophical course, owing to insufficient scientific apparatus and equipment.

Tabor (Iowa) College.-A larger use of elective system.
University of Kansas, Lawrence, Kans.-A two-year medical course, including only the scientific branches, first offered.

Washburn College, Topela, Kans. - Creation of Cepartment of philosophy, giving new courses in psychology, philosophy and logic. Drops degree and course leading to bachelor of letters.

Berea (Ky.) College.-Equipped domestic science building and employed a special teacher. Established courses in farm economy and home economy, two years each. Special teachers' normal course to fill six months of each year not occupied by public schools.

Georgetown (Ky.) College.-Added a new course, called the fine arts course, leading to the A. B. degree. In this course musical study plays an important part.

Millersburg (Ky.) Female College.-A Bible course has been added.
Centenary College, Jackson, La.-A course for the Ph. B. degree has been added.
Baites College, Lewiston, Me.-The study of French has been introduced during the freshman year and may be continued either as required work or electives throughout the course. German may be taken for three years. Chemistry has been strengthened by the addition of two courses and now has six courses. Botany has an additional course; also physics. Argumentation is represented by a course in English.

University of Maine, Orono, Me.-The classical course was established in the fall of 1899.

Colby College, Waterville, Me.-A course in books and libraries, onə hour per week, one term, is given to all sophomore students.

Rock Hill College, Ellicott City, Md.-Greek was suppressed and eliminated from the course of study in sophomore and freshman classes, and the study of German was substitured in its stead.

Woman's College, Frederick, Md.-Requirements for admission raised with a view to uniformity with that of colleges generally.

Mount Holyoke College, South Hadley, Mass.-Established a department of pedagogy.

Wellestey (Mass.) College. - An enlargement of work in archrology.
University of Michigan.-New courses established in marine engineering, in higher commercial education, and in administrative law.

Albert Lea (Minn.) College.-Established a chair of pedagogy.
Gustavus Adolphus College, St. Peier, Hininn.-Established a literary course with degree of B. Lit., and raised the standard of admission into the academy course to be in full line with requirements for entrance into high schools.

East Mississipbi Female College, Mreridian, Miss.-The course of study has been raised one year, so as to correspond with that of the Association of Southern Colleges.

University of Mississippi.-Introduction of courses in electrical and civil engineering and provision for their instruction.

Central Christian College, Albany. Mo.-An English Bible course is provided for. The commercial course is extended to two years, making it a means of more thorough preparation for business life.

Central College, Fuyette, Mo.-A large part of the work in Latin, Greek, and English, formerly classed as freshman, was put back into the academy and the courses broadened by putting in more electives. The German course was lengthened one year.

Missouri Valley College, Marshall, MIo.-Beginning May 31, 1900, this college follows the continuous sessions plan, dividing the year into four terms of twelve
weeks each, the summer term offering advantages to public-school teachers and ir egular students.

Christian Brothers College, St. Louis, Mo.-French, German, and Spanish, six years' course, will be substituted in the future for Greek and Latin.

Drury C'ollege, Springfield, Mo.-Reduced requirements in mathematics in classical course, so that only trigonometry following advanced algebra and solid geometry are required for graduation.

Tarkio (Mo.) College.-The scientific course is being lengthened to four years.
Montana College of Agriculture and Mechanic Arts, Bozeman, Mont.-Established a course in civil engineering.

Dartmouth Collcge, Hanorer, N. H.-Established the Amos Tuck School of Administration and Finance, a graduate school of two years' course.
Netarl (N.J.) Technical School.-A course in theoretical and applied electricity was opened at the beginning of the school year 1890-1900.
St. Siephen's College, Annandale, N. Y.-Abolished a three years' special course. Do away with preparatory course when those now taking it go into college. Estended the courso in chemistry by 100 per cent, and reauire adequate laboratory work. Extended courses in philosophy. Established a four years' course in oratory.

Adelphi College, Brookiyn, N. I.-Adaed a normal art course for students who wish to become teachers of drawing, and a school of musical art.

St. John's College, Brooklyn, N. Y.-Raised the requirements for admission to the preparatory department and added one year to the Greek course in that department.

Clarkson School of Technology, Potstam, N. I.-Established a civil engineering course.

Wake Forest (N.C.) College.-Laboratory work now required in physies. More English reaquired for graduation.

Kenyon College, Gambier, Onio.-A new course of study has been added in the collegiate department leading to the degree of bachelor of letters. The languages required for admission are three years of German and one year of Latin. The work emphasizes modern languages, English literature, and history.

Western College, Oxford, Ohio.-The literary course of three years leading to the English diploma has been dropped.

Lake Erie College, Painesville, Ohio.-New courses in Italian, history of music, and Angio-Saxon.

Heidelberg University, Tiffin, Ohio.-Changed from group system during junior and senior years to an average of eight hours of elective work per week. The work of the lower classes is entirely required.
Beaver (Pa.) College.-Course of study changed from seminary to full college course.

Bryn Maur (Pa.) College.-Solid geometry and trigonometry have been withdrawn from the subjects required for the A. B. degree. A graduate course in German literature is given for the first time. A course in law (law of contract) is given for the first time. A graduate conrse in constitutional law has been arranged. A department of applied mathematics has been organized, giving both graduate and undergraduate courses. Graduate work in archæology has been organized and added to the subjects which may be ofiered for the Ph. D. degree. Practice courses in connection with the graduate work in education have been organized.

Franklin and Harshall College, Lancaster, Pa.- The course of study was changed at the beginning of the year so as to make Greek elective or allow students to begin Greek in the freshman year. The list of electives was also enlarged. Students who take Greek receive the degree of A. B.; others receive Ph. B.

Lehigh University, South Bethlehem, Pa.-Added a course in marine engineering. Suarthmore (Pa.) College.-New courses offered in English, history, economics, and Biblical literature.

Waynesburg (Pa.) College.-Added a number of electives in junior and sonior years.

Erskine College, Due West, S. C.-The doors of the literary and scientific departments will hereafter be open to women.

Converse College, Spartanburg, S.C.-Abolished the preparatory department.
University of South Dakotu, Termilion, S. Dak.-The B. L. degree has been dropped and the Ph. B. degree has been substituted.

Grant University, Athens, Tenn.-The standard of requirement in English has been raised as established by the joint conference of colleges and secondary schools.

Knoxville College, Knoxville, Tenn.-One year added to the normal course, mak ing it equal to the preparatory course.

University of Tennessee, Knoxville, Tenn.-The reguiar course in agricultural science was rearranged and strengthened and the short course in agriculture of six weeks established, designed especially for famers.

Milligan (Tenn.) College.-The tendency is toward fewer strdies and longer time on a study, leaving chemistry, electricity, and more elaborate physical science to State schools and universities, and to make our own a fuller English, clas sical, political or economical, and philosophical course.

Fisk University, Nashville, Tenn.-One year has been added to the normal course.
Greeneville and Tusculum (Tenn.) College.-More liberty for elective work in junior and senior years.

Trinity University, Teluacana, Tex.-All stadents required to take courses in English Bible to be credited on work for A. B., B. S., or B. L. èegrees.

Hampden-Sidney (Ta.) College.-Added courses in physics and chemistry and doubled instruction in logic, history of philosophy, geology, German, and French。

Randolph-Macon Woman's College, Lynchburg, Ta.-Students granted three hours of free electives in junior and five in senior year; other electives are by groups.

University of Washington, Seattle, Wash.-Added a school of pharmacy.
Gonzaga College, Spoloane, Wash.-A commercial course of three years was added. A complete course of philosophy and theology established for divinity students.

Whitman College, Walla Walla, Wash.-A development of scientific work through increased facilities afforded by new building and equipment.

Unicersity of Wisconsin, Mudison, Wis.-Hstablished a school of commerce.

HIGHER COMMERCIAL EDUCATION.
The movement for the establishment of courses or denartments of instruction in commerce in connection with the higher institutions of learning in this country, a description of which was published in the Report of the Commissioner of Education for 180\%-98, page 2411 et seq., has continued during the past few years. In addition to the institutions mentioned in that report, courses in commerce have been established in New York University, New York City; Lowisiana State University, Baton Rouge, La.; Dartmouth College, Hanover, N. H.; University of Vermont, Burlington, Vi.; University of Wisconsin, Madison, Wis.; Ohio State University, Columbus, Ohio; University of Michigan, Ann Arbor, Mich.

The purpose or aim of the courses in commerce is to prepare men for the modern forms of business and for the consular, diplomatic, or other service in which a knowledge of business is essential to a successful career. These courses in nearly all of the above mentioned institutions were established in 1900, and are therefore in the first year of their existence. This line of work being entirely new to the
institutions, the courses of instruction as outlined must be regarded as merely tentative, to be changed and enlarged as experience and the needs of students shall suggest. In order to show the nature of the work offered, the courses of instruction in commerce, so far as outlined by several of the institutions, are given in the following pages:

## Louisiana State University.

FRESHMAN YEAR.

| First term. | $\begin{gathered} \text { Hours } \\ \text { per } \\ \text { week. } \end{gathered}$ | Second term. | $\begin{gathered} \text { Hours } \\ \text { per } \\ \text { week. } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| English. |  | English . |  |
| Mathematics.... | 0 | Mathematics |  |
| Commercial geography | 3 | Commercial geography |  |
| Commercial arithmetic and penmanship | 8 | Commercial arithmetic and accounts.. | 8 |

SOPHOMORE YEAR.

| English. | 3 | English |
| :---: | :---: | :---: |
| Mathematics. | 3 | Surveying |
| Physics. | 3 | Physics . |
| Spanish | 3 | Spanish |
| Civics | 3 | Civics...-.... |
| Bookkeeping | 6 | Bookkeeping .-.. |
| Stenograply and typewriting.-.-...--- | 4 | Field work-surveying |

JUNIOR YEAR.

| English | 3 | English |  |
| :---: | :---: | :---: | :---: |
| French or German | 3 | French or German |  |
| Spanish | 2 | Spunish |  |
| Industriai history of the United States. | 3 | Municipal and local institutions. |  |
| Commercial law .-.... <br> Banking | 5 | Commercial law. |  |
| Economic literature and essays ..---...- | 4 | Economic literature and essays........- |  |

SENIOR YEAR.

| English. | 2 | English | 2 |
| :---: | :---: | :---: | :---: |
| French or German | 3 | French or German | 3 |
| Psychology | 3 | Ethics. |  |
| Economics | 2 | Economics. |  |
| Constitutional law. | 3 | International law |  |
| Spanish ........ | $\stackrel{2}{2}$ | Spanish -..-- | ${ }_{2}^{2}$ |
| Military science | $\stackrel{2}{3}$ | Military science | $\stackrel{2}{3}$ |

The degree of B. S. is granted on the completion of the above course.
Amos Tuck Scerool of Administration and Finance of Dartmouth College, Hanover, N. H.

This school was established in 1900 on an endownent of $\$ 300,000$ given to Dartmouth College by Mr. Edward Tuck, a graduate of the college in the class of 1862 . Candidates for admission who wish to obtain the certificate of the school mast present a bachelors degree or must have completed three years of an undergraduate course, including certain work in history, economics, political science, sociology, English composition and argumentation, and elementary courses in two of the three languages, German, French, and Spanish.

The aim of the school, as stated in the catalogue for 1900-1901, is to give:
First. A body of knowledge and principles applicable to any form of business organization and management-the training which is needed by the business man as such.

Second. A more special preparation for banking, insurance, and railroad service, as well as for domestic and foreign commerce, the diplomatic service, and public administration.
Third. Such further teaching and training as will prepare men for journalism or for participation in civic affairs.

The courses appropriate to the three interests are identical for the first year, and are as follows:

Modernhistory.-European political history, 1789-18\%8; United States policical history, 1783-187\%.

Economics.-American industrial development: Especial attention given to the period since the civil war, and a careful study made of modern industrial organization, inciuding the development of the great manufacturing industries, the growth of corporations, trusts, and monopolies: the history and problem of transportation; stock and produce exchanges; selations of capital and labor, and the effect of modern methods of business on producer and consumer. History and theory of money; development of economic theory.
Political science.-American constitutional law.
Sociology.-Anthropological geography; social statistics and applied sociology.
Language.-Advanced study in two of the three languages, German, French, and Spanish.
English composition and speatking.-Business forms and commercial correspondence; discussion of current questions.
In the second year of the course the studies are assigned to students according to the career which they intend to adopt, and are selected from the following:

## MODERN HISTORY AND DIPLOMACY.

3. Modern history.-Lectures on the political history of Canada, Mexico, and the South American States, Asia and Africa, with special emphasis on recent developments and particular reference to the phases of their history which might bear on their relations with this country. Under the direction of the instructor the students will do constructive work in the political history of Europe since 1878, each student covering a given period, and profiting from the restilts of the work of other students.
4. Diplomacy:-Origin and evolution of modern diplomacy; qualifications and methods of typical modern diplomats: the course of certain specially noteworthy negotiations from the Congress of Vienna to the Veneznela case, including the evolution and history of the Monroe doctrine, the organization of American and foreign diplomatic and consular services, principles of diplomatic procedure, the duties laid down by the United States Government for its agents in foreign coumtries. Constructive work in the history or Europe since 1878 will be done by the students.

## business organization and management.

1. Corporation finance.-Forms of investment securities, methods of corporation "financiering'," consolidation, bankruptcy, receivership, reorganization., general principles of investment. See also course 1 (e) under "Transportation."
2. Money markets and speculation. - Movements of money and rates of domestic exchange. New York as a financial center and the influences affecting interest rates. Note and bill brokers. Foreign exchange movements, including a study of the English money market. Panics, signs of their approach and the methods of meeting them. Detailed study of stock and produce exchanges, including a comparison of the exchanges of England and the continental countries.
3. Industrial resources and industrial organization. -Detailed study of the importantraw products of the United States from the standpoint of costs, markets, and transportation facilities. Consideration of the more important manufacturing industries of the country, especially iron and steel. A study of the methods of business organization devised for the conduct of these industries. See also course 1 ( $a$ ) under "Transportation," and course 1 (b) under "Finance" for typical instances of the organization of great undertakings.
4. Accounting and auditing. -General principles of accounting; nature of the balancesheet and determination of what constitutes a profit. Accounting methods of corporations. General principles of auditing. Theory of depreciation or the writing off of diminishing value. Going concerns vs. those that have ceased operations. Economic value of location. See also course 1 under "Accounting."
5. Investments.-A series of lectures by an experienced financier on the practical handling of investments.
6. Banking.-(a) Law: Detailed study of the bank laws of the United States and of typical States and of generally accepted banking practice. (b) Organization: The organization of a bank for business, with the duties and liabilities of its officers and employees. Comparative study of national, State, private, and savings banks, and loan and trust companies: clearing houses. their functions and administration. (c) Operation: Practical methods of operation. Forms of credit transactions, note issues, domestic exchange. Comparative study of English and continental banks.
7. Public finance.-Methods of public administration. Pablic expenditure and revenu9. Relation of the Treasury Department to the money market in the issuance of bonds and the placing of deposits. National. State. and municipal debt and taxation. Typical States and municipalities wili be carefully studied.
8. Railroad service.-(a) Organization: The organization of a railroad for business, with a discussion of the duties of office s and employees. (b) Operation: Practical methods of operation, including a careful study of the reguiations governing all forms of railroad service. A study of the traffic department, including systems of car accounting. Theories of rates and methods of forming classifications and rate schedules. Fast freight lines, joint rates, and various forms of railroad associations. (c) Accounting and auditing: See courses 1 and 2 under "Accounting" and course 4 under "Business organization and management." (d) Mechanics: Study of the elements of railroad construction and mantenance and their costs. Details of locomotives and cars, their use, construction, and repair. Modern mechanical and safety devices, including brakes, couplers, signaling systems, and the like. Purchasing department, with consideration of properties of materials and railroad supplies. See also course 8 under "Business organization and management" for railroad materials produced by iron and steel industries. (e) Management: Competition, discrimination, pooling, combination, consolidation, State ownership or control. See also course 1 under $\cdot$ Business organization and management."
9. Water transportation (inland).-(a) Lakes and rivers: The service as a competitor of railroads. The development of lake traffic, with a study of modern facilities. The deep waterways projects. Decline of̂ river commerce. (b) Canals: Their economic value and the extent of their use.
10. Foreign trade.-(a) Economic geography: A survey of the present economic condition of the different parts of the world, their products, resources, and routes of trade, and the infuence of physical and social causes in determining that condition. Economic phases of colonial development. (b) Foreign exchunge : Theory of foreign exchange and the causes that determine rates. Methods of international payinent, morements of capital, monetary standards of foreign countries as they influence international settlements. (c) Foreign commerce of the United States: Development of ocean shipping. Export and import trade of the United States and its competitive relation to other countries. Tarifl conditions of the various countries and other forms of commercial interference. Commercial conventions and treaties. See also course 3 under "Business organization and management" and course 2 under "Statistics."
11. Legal conditions of international trade-A series of lectures which aim to present the practical legal aspects of international dealing.
12. Principles of accounting. - A series of lectures on the principles of railroad and industrial accounting as applied to financial and operating administration. Methods of corporation bookkeeping and forms of financial organization and management briefly considereā.
13. Theory and practice of railroad statistics.-(a) Revenue and expenses; why railroads are operated, how organized and administered, and the relation of accounting, auditing, and statistics to operation: general plan and technique of rail:oad accounting. (b) Revenue accounting, freight and ticket; how the money is collected and covered into the treasury; the safeguards provided. (c) Disbursement accounting, stages and methods of authorization; checks provided; signifcance of the difierent certifications; possibilities of fraud. (d) Stores and car accounting, various systems; watching balances; use of the car record in car distribution. car mileage, clearing houses, the home record, the foreign record, the interchange record. (e) Statistics of operation, revenue disbursement, motive
power, transportation, and maintenance of way; use of statistics in handling a property. ( ${ }^{\prime}$ ) General books, ledger, side ledgers, journal, journal entries, accounts current, general balance sheet, organization and methods of the accounting office, the division and general office, the shops, the storehonse, the station agency.

## INSURANCE.

A series of lectures designed to illustrate the practical workings of insurance as condacted to-day in all its important forms, with special reference to the United States. After a brief discussion of the economic conception of insurance, its history, development, problems, and social service, attention will be given to fire and casualty insurance, to employers liability and corporate suretyship, but special study will be devoted to its most highly developed form in life insurance. This will involve consideration of fundamental assumptions. rate maling, policy construction, varied benefits, field management, a dvertisements, compensation, solici tation, medical selection, practical accounting, investments, office work, corporate management, State supervision, insurance law, insurance by the State. A criticul estimate will be presented of the leading theories and different practices reiated to these questions, the object being to give a just estimate of the business and a comprehensive innowledge of its present-day workings.

STATISTICS.

1. History, iheory, and technique of statistics.-A course in statistical methods and results, with practical woris in investigation and tabulation. An attempt to determine the laws that govern group actions of men. Sources and reliability of statistical data. The methods of distinguishing true and false inferences.
2. Studies in American statistics.-Critical stady of the contributions of statistics to our knowledge of production, banking, coinage, prices, wages, and particularly domestic and foreign commerce.

## LAW AND POLITICAL SCIENCE.

5. Commercial law. - An outline of the law of real property, including deeds, mortgages, and wills; of the law of contracts (Anson on Contracts); of negotiable instruments (Bigelow on Bills, Notes, and Cheques); of personal property, including sales and bailments; of agency, carriers, insurance, and trustees.
6. Industrial and commercial corporations.-A course of lectures treating of legal persons, natural and artificial; causes of the increase of artificial persons (corporations) since 1763 and the consequent development of corporation law; distinction between partnerships and corporations; modes of forming corporations; inviolability of charters; powers of corporations and their officers and agents; fiduciary relations of their off eers and agents; rights of stockholders; relation of stockholders to each other: issue of stock and rights of creditors; industrial trusts.
7. International law. -This course is historical and explanatcry of present international relations. It treats of the origin and development of the rules that generally govern the intercourse of modern civilized States, and specified topics of present interest, such as the effects of annexation upon international obligations, recent cases of intervention, the Hague Conference, contrabazd of war, and continuous voyages.
8. Politics and administration.-A study of American political parties since 1873; their organization and increasingly centralized control; their policies, and methods chosen for executing them; existing electoral machinery, its prachical working and defects; some proposed remedies.

## ADMINISTRATION.

1. Municipal administration.-A series of̂ lectures in which the aevelopment of municipal policy will be traced with regard both to the forms and the aims of municipal government. The town meetings, the town council, the city system, and metropolitan administration will be considered in their constitutional bearings and in their practical operation. A comparison of typical city charters, American and foreign, will be made. The proper sphere of the municipality will be considered, first, in its traditional function as protector of person and property; secondly, in the extension of its runctions to include the control of public utilities, the education of the electorate, and the care of the dependent classes. The lecturer will discuss the causes of municipal corruption, especially as found in economic conditions, and will trace the relation between municipal reform and social reform in general.
2. Public administration.-See course 4 under "Modern history and diplomacy," course 2 under "Finance," and course 8 under "Law and political science."

DEMOGRAPHY AND SOCIAL INSTITUTIONS.

5. Demographiy.-This is a study of population or the units of all forms of social life. It involves a consideration of the economic value of various nations and peoples as producers and consumers of commodities. This is followed by an investigation of the social groups or ciasses into which population tends to fall, both those involved in the social division of labor and those which have a more natural basis.
6. Psychologiy of men in association.-Social phenomena are here viewed from the subjective side and interproted as modifications of the individual mind due to contact. Human institutions are treated as an expression of the spiritual life of men. Public opinion is analyzed and an attemnt is made to interpret sympathetically trade mionism. mass and class feeling, and all important group aspirations and rivalries. Social problems raised by racial contact are taken up, and the adaptation of political and social life to the peculiar psychic condition of each people. This is the study of the social environment, as expressing the mind of the individual and in turn modifying it.

## LANGUAGE.

The work in language will be a continuation of that of the first year. Students will be expected to pursue throughout the year the study of one of the three modern languages, German, French, and Spanish.

THESIS.
A thesis may be required embodying original research and representing work in the field of study which the student has been especially pursuing.

The subjects of the second year have been assigned or classified as furnishing technical training for careers in general mercantile and commercial business, banking, railroad service, foreign trade, insurance, administration, journalism, and civic affairs.

## School of Commerce, Accounts, and Finance of New York Universaty.

The course of study extends over a period of two years. The following outline of the subjects einbraced in the curriculum is announced, subject to changes:

## A. ACCOUNTING.

1. Theory of accounts.-Principles of accounting; purpose of accounts; single and double entry; the different books of accounts.
2. Practice in cccounting. - Description and illustration of accounts of individuals; accounts of partners; accounts of corporations - commercial, financial. manufacturing, transportation, etc.; municipalaccounts; Federalaccounts; receivership; trusteeship; execatorship; liquidation, etc.; statement of affairs.
3. Auditing. -Methods of procedure in examination of accounts of individuals, partners, corporations, municipalities, etc.; verification of balance shests and statements of piofit and loss; special reports.

## B. COMMERCE.

1. Foreign commercial relations. - Trade policies of foreign governments to one another and to colonial dependencies; foreign commerce of United States; theory of international trade; economic aspects of colonial development; foreign trade of America as affected by recent acquisitions of territory; consular service and regulations as affecing commerce.
2. Domestic commerce and transportation. - History of transportation and of railway policies; economic and social bearings of present transportation problems; railway construction-speculative management-stocks and bonds; railway failures, receiverships, reorganizations, negotiations, profits; theories of rates, classification, discrimination, competition, combination railway; employers' liabilities,
labor relief, insurance, State ownership and management; comparative stuay of interests of inventors, of employees, of public, of State.

## C. FINANCE.

1. Mroney.-History of money; nature and functions; theories of money supply; stability of prices; commercial prosperity; debtors' and creditors s'andard of deferred payments; Government paper money; bimetallism; monetary legislation of United States.
2. Banking and credit.-History and theory of banking and credit operations; banking systems of principal foreign States; proposed methods of banking reform in United States; instruments of credit; classes of securities; stock and produce exchanges; current legislaticu upon banking.
3. Public fincnce.-Revenues and expenditures of the various political units in America (local, State, national); chief features of public financial administration; history of financial development (Federal, State, and municipal); recent problems of State taxation.
D. LAW.
4. Contracts: 2 hours weekly.
5. Sales: 1 hour weekly.
6. Agency: 1 hour weokly.
7. Partnership: 2 hours weekly.
8. Bills and notes: 2 hours weekiy.
9. Trusts (optional): 2 hours weokly.
10. International law (optional): 2 hours weekly.
11. Insurance (optional): 2 hours weekly.

## E. ADMINISTRATION.

1. General principles of business organization and management.
2. Administration of public business.

> Wharton School of Finance and Economi of the University of Pennstlitania.
> Freshman Year.

| Subjects. | Hours pe1• weel. |  |
| :---: | :---: | :---: |
|  | First term. | Second term. |
| English composition. | 2 |  |
| English language.... | 1. |  |
| A merican history <br> Solid geometry | ${ }_{2}^{2}$ |  |
| Trigonometry .----- |  | 2 |
| German or French - |  | 3 |
| Accounting--.------ | 3 |  |
| Physical and economic geograply | $\stackrel{2}{2}$ |  |
| Constitutional law -----------. | $\stackrel{2}{2}$ |  |

SOPHOMORE YEAR.

| Modern novelists. | 2 |  |
| :---: | :---: | :---: |
| Modern essayists. |  | 2 |
| European history |  |  |
| German or French. | 3 | 2 |
| Practical finance and foreign exchange Business law and contracts | $\stackrel{2}{2}$ | 2 |
| Theory and geography of commerce |  | 2 |
| Political economy |  | $\stackrel{2}{2}$ |
| Legislative procedure and orga |  | 1 |
| Public speaking (optional) | 1 |  |

*For students who present solid geometry and trigonometry on admission.

## Wharton School of Tinance and Economy of the University of Pennsylvania-Continued.

TUNIOR YEAR.

| Subjects. | Hours per week. |  |
| :---: | :---: | :---: |
|  | First term. | Second term. |
| English literature* |  |  |
| Logic: <br> Ethics |  |  |
| Economics\% |  |  |
| Sociology * |  |  |
| Americal history* |  |  |
| Modern European history:...- |  |  |
| English industrial development |  |  |
| Elementary common law |  |  |
| Roman law *-.......-.... |  |  |
| Charities and correction* |  |  |
| Race traits and distribution* |  |  |
| Art and history or̂ newspaper making |  |  |
| $\begin{aligned} & \text { Current iopics*- } \\ & \text { Practical politics* } \end{aligned}$ |  |  |
| Panics and depressions: |  |  |
| Americail commerce ... |  |  |
| Industrial development of the United States. |  |  |

## SENIOR YEAR.


*Electives from which esch student must choose 16 hours in each term.

## Central High School, Philadelphia, Pa.

The deparment of commerce was inangurated in September, 1898. It has a four years' course of study, as follows:

## FRESTMAN YEAR.

English.-Composition writing with a study of classical literature in translation, and of American literature. 4 hours.

Latin.-Elements of Latin and easy readings, 4 hours.
Mailicmatics.-Algebra, 5 hours.
History.-Greek and Roman history and European history to 800 A. D., 3 hours.
Sciencc.-Raw materials of commerce (animal, vegetable, and mineral products), 4 hours.

Economics.-Philadelphia history, government, and business interests (lectures and quizzes), 2 hours.

Business technique.-Business forms, with penmanship. Practice, 2 hours.

English.-History of English literature, with composition writing, 3 hours.
German.-Grammar, reading, and conversation, 5 hours.
Mathematics.-Advancedcommercial arithmetic, including mensuration and the metric system, 2 hours. Elements of geometry and trigonometry, 3 hours.

Hisiory.- English and modern European history, 3 hours.
Science and economics.-Commercial geography, 2 hours. Trade centers of the world-lectures in connection with the course on commercial geography, 1 hour.

Business technique.-Bookkeeping, 3 hours. Stenography, 2 hours. Typewrit. ing (optional).

## JUNIOR YEAR.

English.-Readings from English literature with essay writing, 2 hours.
German.-Reading, composition, and conversation, 3 hours.
Romance languages. - Spanish or French, 4 hours.
History. - American history, 2 hours.
Science.-Physics and chemistry, 4 hours.
Economics.-Political economy, 2 hours.
Business technique.-Mechanical drawing, 2 hours. Observation of and report on office practice, business methods, etc., 3 hours. Stenography, 2 hours. Typewriting (optional).

SENIOR YEAR.
English.-Readings from literature and thesis writing, 3 hours.
German.-Advanced reading, conversation, and correspondence, 3 hours.
Romance languages. -Spanish or French, 3 hours.
History.-Modern industrial and commercial history (of the United States and England), 3 hours.

Science.-Industrial chemistry, 2 hours.
Economics and political science.-Transportation, banking, and finance, 4 hours. Statistics (in connection with thesis writing), 1 hour. Study of government (chiefly of cities), 3 hours.

Business technique.- Ethics of business and commercial law, 2 hours.
School of Commerce of the University of Wisconsin.
This school was established in 1900 for the purpose of supplying facilities for the training of young men who desire to enter business careers, especially in such fields as domestic and foreign commerce and banking, or branches of the public service, like the consular, in which a knowledge of business is essential. The course of study extends through four years, and is as follows: (The figures indicate number of hours per week.)

## FRESHMAN YEAR.

First semester.-Ficonomic geography, 4, or American history, 4;1 German, French, or Spanish, 4; English, 3; trigonometry, 2; chemistry, 3; drill and gymnastics, 2.
Second semester.-Economic geography, 4, or American history, 4; economic history of England, 2, language continued, 4; English, 3; chemistry, 3; drill and gymantics, 2.

SOPHOMORE YEAR.
First semester.-History of commerce, 2; medireval history, 3; business methods and accounts, 2; language continued, 2; English, 2; physics, 5; drill and gymnastics, 2.
Second semester.-Business organization and management, 2; elementary economics, 3; modern history, 3; language continued, 2; physies, 5 ; elective, 2; drill and gymnestics, 2.

JUNIOR YEAR.
First semester.-Money and banking, 3 ; transportation, 2; generation and transmission of power, 3; language continued, 2; technical elective, 3; free electives, 0 .

[^106]Second semester.-Commercial law, 3; transportation, 2; nineteenth century history, 3; ${ }^{1}$ anguage continued, 2 ; technical elective, 3 ; free electives, 5.

## SENIOR YEAR.

First semester.-Commercial law, 2; materials of commerce, 3; language continued, 2 ; thesis, 2 ; technical elective, $?$; free electives, 6 .
second semester.-Commercial law, 2; materials of commerce, 3; language continued, 2 ; thesis, 2; technical elective, 3; free electives, 6.

## TECHNICAL ELECTIVES

The technical electives have been arranged in two groups, one of which must be elected by each student. The group preparatory to the business of banking consists of the following courses: (a) Elements of money and banking; (b) history of the currencies of the chief modern nations; (c) corporation finance and securities; ( $d$ ) commercial crises with especial reference to their influence upon the banking brasiness.

The consular group consists of the following courses: (a) Internationallaw; (b) commercial geography of Europe; (c) history of diplomacy; (d) history and characteristic features of the consular services of the chief foreign countries; (e) consular service of the United States.

## OUTLINE OF COURSES IN ECONOMIC HISTORY, GEOGRAPHY, AND COMMERCE.

Economic history of England.-Begins with a study of the economic life of Eng'and as depicted in the doomsday survey, and, with this as a basis, traces the most important changes in the agricultural, manufacturing, and commercial life of the country from that time to the present. Scott's Syllabus of Lectures, and Gibbon's Industry in Englandi. Repeated each semester. Lectures twice a week; quiz once a week.

The history of commerce: ( $\alpha$ ) The development of the world's commerce from ancient times to the Napoleonic era.-Special attention is given to the materials and the machinery of commerce, to trade routes, and to the relations between commercial development and other branches of the history of civilization. Lectures and assigned readings, first semester, twice a week.
(b) Commercial policies.-Study of commercial treaties and tariff history since the Napoleonic era. A sketch of the histories of the commercial policies pursued by the chief modern nations previous to the present century will be given by way of introduction. Lectures, assigned readings, and topics, second semester, three times a week.

Currency history.-Systematic presentation of the currency history of England, France, Germany, and the United States. Second semester, three times a week.

Commercial geography-(a) Introductory course.-A study of the technique of productive industry. Topical reports and lectures. Repeated each semester, four times a week.
(b) Extractive industries of the United Siates.-A study of the natural and social resources of the United States and of the chief extractive industries for the purposes of determining their location. condition, and relations to each other. Lectures and required readings. First semester, three times a week.
(c) Manufactiring industries of the United States.-The evolution, present location, and condition of the chief manufacturing indrstries, their relations to one another, to the extractive industries, to transportation, credit, and market agencies, and foreign trade. Lectures and required readings. Second semester, three times a weel.
(d) Commercial geography of Europe.-Natural resources and industries of the chief European comntries, with special emphasis on their location, their present state of development, and their relations to the commercial interests of the United States. Second semester, twice a week.

Business forms and accounts.-Various methods of accounting and auditing actually employed by and suitable to great corporations. Also a study of business forms, such as invoices, sales, accounts, custom-house documents, ships' reports and papers, bills of lading, warehouse receipts, charters, insurance policies, etc. First semester, twice a week.

Transportation-(a) Railroad transportation.-History of its development in the chief modern nations, with a discussion of its economic and legal aspects. Lectures and assigned readings. First semester, twice a week.
(b) Water transportation.-Brief historical survey of the growth of inland and ocean navigation, followed by a description of the leading water routes of the world and the industrial forces and geographical and political conditions determining them. Lectures and assigned readings. Second semester, twice a week.

Materials of commerce-(a) Vegetable.-Throughout the year two lectures per week and two hours per week of laboratory worl.
(b) Chemical.-One lecture per week and two laboratory periods.

Economic crises.-Organization of the mariset, causes and characteristics of economic crises from the point of view of the business manager and the banker, history of crises, concrete study of the more important crises. First seme ter, 3 hours a week.

Corporation finance and securities.-Methods of financiering employed in great corporations, with especial reference to the various sorts of negotiable securities which they issue and the circumstances which affect their value. A technical study of stock and produce exchanges and of their relations to the business of banking. Lectures and assigned reading. Second semester, twice a weez.

Business organization and managcment.-Lectures, assigned readings, and topical reports. Second semester, twice a week.

Consular service-(a) Foreign consular service.-Brief outline of the growth of foreign relations, history of the consular services of the chief countries of the world, methods and work of the consular officers of the chief foreign countries. First semester, three times a week.
(b) Consular service of the United States.-Detailed study of the work and duties of the consular officers of the United States, combined with practical work in the investigation of existing industrial conditions and the making of such reports as are required of consuls. Second semester, three times a week.

South American and West Indian commerce.-Courses of lectures by specialists on commercial geography of the chief South American States, their systems of banking, exchange, currency, creadits, transportation, tariff commercial law, etc.

Seminaries.
New buildings.

| Institution. | Purpose. | Cost. |
| :---: | :---: | :---: |
| Alabama Polytechnic Institute, Auburn | $\left\{\begin{array}{l}\text { Forge and foundry } . . . . .\end{array}\right.$ | \$2, 4.03 |
| St. Bernard (Ala.) Colle |  | 7, 000 |
| University of Arizona, Tucson, Ariz |  | 12,000 |
| Ouachita College, Arkadelphia, Ark |  | 15,000 |
| University of Arkansas, Fayetteville, Ark | $\left\{\begin{array}{l}\text { Laboratory -...--................. } \\ \text { Residence.......... } \\ \text { Root cellar and granary }\end{array}\right.$ | $\begin{array}{r} 2,100 \\ -700 \\ r \quad 350 \end{array}$ |
|  |  |  |
|  |  |  |
| University of California, Berkeley, Cal |  | $\begin{array}{r} 1,575 \\ 13,387 \end{array}$ |
| Pomona College, Claremont, Cal | Gymnasium |  |
| College of Notre Dame, San Jose, Cal | Music . | 20,000 |
|  | Laboratory | 1,800 |
|  | Chapel <br> Science <br> Laboratory | $\begin{aligned} & 250,000 \\ & 200,000 \\ & 150,000 \end{aligned}$ |
|  |  |  |
|  |  |  |
| Florida Agricultural College, Lake City, Fla |  |  |  |
| Seminary West of the Suwanee R |  |  |  |
| Lucy Cobb Institute, Athens, Ga |  |  |
| Monroe Female College, Forsyth |  |  |
| Brenau College, Gainesvill |  |  |  |  |
| Young Harris (Ga.) College |  |  |
|  | Farm hot | 1. 000 |
|  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |
|  | General --............... 15,000 |  |
| Monmouth (Ill.) College |  |  |
| Moor'es Hill (Ind.) College |  |  |  |  |
|  |  | 80,000 |
|  |  | 45, 000 |
|  |  | 60,000 |

## New buildings-Continued.

| Institution. | Purpose. | Cost. |
| :---: | :---: | :---: |
|  |  |  |
| Iowa Agricultural College, Ames | $\left\{\begin{array}{l}\text { Barn } \\ \text { President's house }\end{array}\right.$ | $\$ 13,500$ 12,000 |
| Drake University, Des Moines, | Engineering. | 154, 800 |
| State University of Iowa, Iowa City | Hall of Liberal Ar | 150, 100 |
| Midland College, Atchison, Kans. | Observatory.- | 150,200 |
| Baker University, Baldwin, Ka | \{Gymnasiu | 10,000 |
|  | QLibrary | 25, 000 |
| University of Kansas, Lawrence | Chemistr | 55, 000 |
| Bethany College, Lindsborg, Kans | Ladies' Hal | 7,000 |
|  | (Agriculture | 25, 000 |
| Kansas Agriculcural College, Manhattan | Dairy barn | 3,000 |
|  | $\left\{\begin{array}{l}\text { Miechanics } \\ \text { Heating plant }\end{array}\right.$ | 9,000 5,000 |
| St | \{Observatory.. | 2,0f0 |
| 5 | Boiler house | 3,000 |
| Bethel Female College, Hopkinsville, Ky | Music and ar | 2,500 |
| Louisiana State University, Baton Rouge | Assembly hat | 10,000 2,500 |
|  | Engineering | 3,200 |
| University of Maine, Orono | Drilinali. | 25,000 |
| Westbrook Seminary, Woodfords, | Gymnasium | 7 7,000 |
| Maine Wesleyan Seminary and Female College, Kents Hill | Dormitory | 10,000 |
| Rock Hill College, Ellicott City, Mal | Social hall | 2,000 |
| Lasell Seminary, Auburndale, Mass | Gymnasium | 2,500 |
| Smith College, Northampton, Mass | \{隹 | 102,000 |
| Mount Holyoke College, South Hadley, | - Dormitory |  |
| Tufts College, Mass | Science | 45,000 |
| Wellesley (Mass.) College | \{Dormitory | 50, 000 |
| Williams College, Williamstown, Mass | Social and religious | - 35,000 |
|  | Women`s building | 95,000 |
| Michigan Agricultural Colleg | Dairy | 15,000 |
|  | Medicine | 70,000 |
| rs | Engineering | 10,000 |
|  | Medicine | 15,000 |
| University of Minnesota | Medicin | 15,000 |
| Mississippi Agricultural and Mechanical Collcg | Dairy | 2,200 |
|  | Dormitory | 18,500 |
| Mississippi Industrial Institute and College | \{nfirmary | 7,500 |
|  | Hieating an | 4,000 |
| Miss. | Residence | 4,000 |
| Clarksburg (lo.) College | Gcneral | 10,000 |
| St. Louis (Mo.) University | Theology | 70, 000 |
| Montana College of Agriculture and Mechanic Arts, Bozeman. | Gymnasium | 1,100 |
| University of Omaha, Bellevue, Nebr | Dormitory | 14,000 |
| Dartmouth College, Hanover, N. H | Dormitory | 45, 000 |
| University of New Mexico, Albuquerque --.-.-. | Laboratory | 17,500 |
| New Mexico College of Agriculture and Mechanic Arts, Las Cruces. | Corral | 2,000 |
| St. Bonaventure's College, Allegany, N. Y | General | 75,000 |
| Hamilton College, Clinton, N. Y | \{Philosophy | 25, 000 |
|  | President | 25,000 |
| Colgate University, Hamilton, N. Y | Aresidents | 5,000 |
| St. John's College, New York City | Fce-making plant | 7,000 |
| University of Rochester (N. Y.) | Cymuasium | 25, 000 |
| Syracuse (N. Y.) University. | Dormitory | 26,000 |
| University of North Carolina, Chapel Hill. | \{施rmitory | 18,000 |
| Kenyon College, Gambier, Ohio | Gymnasium | 17, 000 |
| Oberlin (Ohio) College | \{Chemistry | ${ }^{650}, 000$ |
|  | Music. | 2,500 |
| Lake Erie College, P | Kitchen | 4,050 |
| Scio (Ohio) College | President's hous | 3,000 |
| University of Wooster (Ohio) | Library | $3{ }^{35,000}$ |
| Oklahoma Agricultural and Mechanical College, Still- | SLibrary | 20,000 |
| water. | Chemistry.. | 88,000 |
| Oregon Agricultural College, Corvallis | $\left\{\begin{array}{l}\text { Engineering } \\ \text { Heating plant }\end{array}\right.$ | 18,877 |
| Lebanon Valley College, Annville, Pa |  | 42,009 |
| Blairsville (Pa.) College | Chapel | 4,000 |
| Wilson Female College, Chambersburg, Pa_ | $\left\{\begin{array}{l}\text { Gymanior }\end{array}\right.$ | 10,000 |

New buildings-Continned.

| Institution. | Purpose. | Cost. |
| :---: | :---: | :---: |
| Lafayette College, Easton, Pa | flibrary --... <br> Dormitories | $\begin{aligned} & \$ 30,090 \\ & 40,000 \end{aligned}$ |
| Haverford (Pa.) College | $\left\{\begin{array}{l}\text { Gymmasium } \\ \text { Dormitory }\end{array}\right.$ | 50, 000 |
| Franklin and Marshall College, Lancaster, Pa | Science | 55, 0000 |
| Bucknell University, Lewisburg, | Dormitor | 50, 000 |
| University of Pennsylvania, Philadelphia | Dormitory and | 240,000 |
| Swarthmore (Pa.) Colle | Gymorasium | 16,010 |
| Villanova (Pa.) College | General | 300, 000 |
| Erskine Coilege, Due West, S. | Dormitory | 12,000 |
| South Dakota Agricultural College, Brookings | Agricultur | 7,500 |
|  | Barns. | 2,500 |
| Grant University, Athens, Tenn | Medicin | 20,000 |
| Sullins Coliege, Bristol, Teun | Gener'al | 20, 000 |
| Central Teunessee College, Nashville, Tenn | Chapel | 6,000 |
| Vanderbilt University, Nashville, Ten | Dormitory | 125,000 |
| University of the South, Sewanee, Tem | Infirmary | 25, 000 |
| Burritt College, Spencer, 'Tenn | Store | 5,000 2,000 |
| Agricultural and Miechanical College of trexas, College | Pormitory | 28, 000 |
| Station. | Reosidences | 61,500 |
| Burleson College, Greenville, Tex | Dormitory | \%,000 |
| Baylor University, Waco, Tex | Sining hall | 17,000 |
| Paul Quinn College, Waco, Tex | Dining na | 800 |
| Middlebury (Vt.) College | Sibrary | 54,009 |
| Norwich University, Northfield, Vt | Drill hall | 1,000 |
| Virginia Agricultural and Mechanical College, Blacksburg- | SY.M.C.A | 20, 000 |
| Virginia Military Institute, Lexington | General | 25,000 |
| Washington Agricultural College, Pullman | \{Science- | 53, 000 |
| Gonzaga College, Spokane, Wash | General | 100,000 |
| Lewisburg (W. Va.) Female Institute. | Gymnasium | 3,000 |
|  | Engineering | 100,000 |
| University of Wisconsin, Madison. | Bara-...- | 17,000 |
|  | Dairy | 7,000 |
| University of Wyoming, Laramie. | Sci | 85, 000 |

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## RATIO OF STUDENTS TO POPULATION, 1s\%2-1900.

The following tabular statement, giving the number of students in higher education to each $1,000,000$ persons in the United States from $18 \% 2$ to 1900 , shows a very substantial increase for each class of students represented:
Number of students im higher caucation to each 1.000,000 persons, from 1872 to 1900 (based on the number of students in the colleges of the United States).

| Year. | Under-graduate collegiate and technical students. | Gradu-atestudents | $\begin{aligned} & \text { Law stu } \\ & \text { dents. } \end{aligned}$ | Medical students. | Theolog ical students. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1872. | $5 \% 3$ | \% | 49 | 142 | 83 | 85 |
| 1873 | 739 | 5 | 5. | 176 | 93 | 1.065 |
| 184. | 719 | $\%$ | 61 | 18: | 102 | 1. 101 |
| $18 \% 5$ | 73 | 8 | 61 | 196 | 120 | 1.121 |
| 1876 | 706 | 9 | 59 | 194 | 95 | 1,463 |
| $18 \%$ | 701 | 8 | 61 | 219 | 86 | 1,065 |
| 1878 | 751 | 9 | 64 | 210 | 91 | 1,155 |
| 1879 | 76 | 10 | 62 | 231 | 97 | 1,175 |
| 1380 | $\% 70$ | 8 | $6{ }^{6}$ | 238 | 105 | 1,183 |
| 1881 |  | 9 | 63 | 242 | 93 | 1,162 |
| 1882-83 | 731 | 10 | 57 | 237 | 92 | 1,127 |
| 1883-84 | 711 | 14 | 49 | 230 | 96 | 1,130 |
| 1884-83 | 742 | 15 | 49 | 197 | 103 | 1,106 |
| 1885-86 | $68{ }^{1}$ | 16 | 53 | 201 | 110 | 1,087 |
| 1886-87 | 690 | 21 | 54 | 208 | 10 \% | 1,089 |
| 1887-88 | 685 | 22 | 61 | 231 | 109 | 1,111 |
| 1888-89 | 729 | 22 | 64 | 245 | 114 | 1,174 |
| 1889-90 | 850 | $2 \pi$ | \% | 263 | 112 | 1,327 |
| 1890-91 | 901 | 33 | 82 | 284 | 115 | 1,415 |
| 1891-92 | 984 | 39 | 94 | 281 | 115 | 1,512 |
| 1892-93 | 1.037 | 43 | 10.5 | 298 | 118 | 1,601 |
| 1893-91 | 1,087 | 51 | $10 \%$ | 320 | 113 | 1,678 |
| 1894-95 | 1,128 | 58 | 130 | 331 | 116 | 1. 763 |
| 1895-96 | 1,158 | 62 | 139 | 346 | 114 | 1,819 |
| 1898-9\% | 1,142 | 69 | 146 | 342 | 115 | 1.814 |
| 1897-95 | 1,193 | 74 | 163 | 328 | 117 | 1,875 |
| 1898-9? | 1,196 | \% | 163 | 327 | 111 | 1,8i4 |
| 1899-1900 | 1,233 | $\%$ | 164 | 333 | 106 | 1,913 |

STATISTICAL REVIEW.
Students. - The total number of undergraduate and resident graduate students in universities and colleges for men and for both sexes, colleges for women, Division $A$, and in schools of technology for the year 1899-1900 is reported as 98.928 , an increase of 0,538 students over the number for the preseding year. The number of such students for each year from 1839-90 to 1839-1900 is as follows:

Number of undergradnate and resident graduate students in universities, colleges, and schools of technology, from 1889-90 to 1899-1900.

| Year. | Universities and colleges for men and for both sexes. |  | Colloges for Women, Division A. | Schools of technology. |  | Total number. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men. | Women. | Women. | Men. | Wo nen. | Men. | Women. |
| 1889-90. | 38.056 | 8,075 | 1,979 | 6, 8\%0 | 707 | 41.980 | 19, 6161 |
| 1890-91 | 40, 059 | 9,439 | 2,245 | (6, 131 | $4 \times 1$ | $45,2 \% 0$ | 12. 18.5 |
| 1891-92 | 45, 03.3 | 10, 390 | 2,633 | G. 131 | 411 | 51, 163 | 13,5\% |
| 1892.93 | 46,689 | 11,489 | 3, 158 | 8,616 | 813 | 55,305 | 15,530 |
| 1893-94 | 50, 293 | 13,144 | 3,578 | $9,31 \%$ | 1,5\% | 59, 814 | 18,0:8 |
| $1894-95$. | 52,586 | 14,298 | 3, 667 | 9,467 | 1,105 | 62, 053 | 19, 071 |
| 1893-95- | 56, 556 | 16, 746 | 3,910 | 8,537 | 1, (6) | 65̄, 143 | 21, 221 |
| 1896-97 | 55, 75\% | 16,533 | 3, 913 | 8, 907 | 1,091 | 61,662 | ${ }_{21,543}$ |
| 1897-98- | 58, 407 | 17, 665 | 4,416 | 8,611 | 1,289 | 67.015 | 23, 470 |
| 1898-99 | 58,467 | 18,948 | 4,593 | 9,038 | 1.339 | 67, 50 | 24, 830 |
| 1899-1900 | 61, 812 | 20,45\% | 4,872 | 10,347 | 1,440 | 72,159 | 26,763 |
| Increase (per | 69.4 | 153.3 | 146.2 | 59.6 | 103.\% | 60.6 | 148.7 |

These figures show that while the men students have increased during the period 60.6 per cent, the women students have increased 148.7 per cent. The number of undergraduate students pursuing various courses, so far as reported, is as follows:
Classical courses ..... 37,658
Other general culture courses ..... 19, 391
General science courses ..... 10, 925
Agricultare ..... 2,852
Mechanical engineering ..... 4, 459
Civil engineering ..... 3,140
Electrical engineering ..... 2,555
Mining engineering ..... 1,261
Architecture ..... 453
Pedagogy ..... 9,524
Business ..... 7,953

The number of students receiving instruction in military drill was 18,585.
Degrees.-The number of degrees conferred during the year was as follows:
Degrees conferred for work done.

| Degrees. | On men. | On women. | Degrees. | On men. | On women. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A. B | 5,129 | 2,146 | A. M | 1,106 | 29 |
| B. ${ }^{\text {P }}$ | 2,473 | 591 | M. S. | 140 | 17 |
| Ph. ${ }^{\text {B }}$ | 824 | 521 | C. E- | 164 | 0 |
| B. L | 318 | 814 | M. E. | 231 | 0 |
| B. C. E | 27 | 0 | E.E. | 61 | O |
| B. M. E | $3 \%$ | 0 | M. L | 15 | 11 |
| B. E. E | 19 | 0 | E. M | \% | 0 |
| B.E. M | 3 | 0 | Ped.M | 6 | 24 |
| B. E | 18 | 0 | Ph. $\mathrm{Mi}^{\text {I }}$ | 6 | 6 |
| B. Arch | 9 | 1 | Mus. M | 1 |  |
| B. Agr | 43 | 5 | M. Arch | 1 |  |
| Mus. B | 9 | 197 | M. C. E- | 1 |  |
| B. Ped | 94 | $12 \%$ | M. M.E | 4 |  |
| B. 0 | 1 | 6 | Ped. D | 4 |  |
| 13. R. A | 1 | 0 | Ph. ${ }^{\text {d }}$ | 32 | 20 |
| B.L.S | 3 | 20 | Se. D | 2 | 0 |
| B. S. In | , | 0 | Iitt. ${ }_{\text {S }}$ | ${ }_{18}^{2}$ |  |
| B. Paint | 0 | 40 | S. T. D | 1.8 |  |
| L. A | 0 | 2 | Total | 11,1\% 7 | 4, 295 |
| A. C | 9 | 0 |  |  |  |

Honorary degrees conferred.

| Degrees. | Number. | Degrees. | Number. |
| :---: | :---: | :---: | :---: |
| D. D | 273 | M. S |  |
| LL. D | 161 | M. $\mathrm{E}^{\text {c }}$ |  |
| Ph. D | 23 | C. E |  |
| S.T.D | 6 | A. B |  |
| D.C.L | ? | Doc. Arch |  |
| L. H. D. | 9 | Ped. 1 - |  |
| Litt. D-- | 9 | LT. M |  |
| Sc. D-... | 10 | LI.B |  |
| Doc. Eng |  | B.L |  |
| A. $\mathrm{M}^{-}$ | 180 | Total | 701 |
|  |  |  |  |


| Institution. | On examination. |  | Honorary. |
| :---: | :---: | :---: | :---: |
|  | On men. | On women. |  |
| 1. University of California | 1 | 1 |  |
| 2. Leland Stanford Junior University | 2 | , |  |
| 3. Yale University --------- |  | ) | 0 |
| 4. Columbian University, Washington, | 4 | 1 |  |
| 5. Georgetown University | 2 | 0 |  |
| 6. University of Chicago | 39 | 4 | 0 |
| 7. Austin College, Effingham, | 0 | 0 |  |
| 8. Ewing (Ili.) College -.. | 0 | 0 |  |
| 9. Knox College Galesburg, In | 0 | 0 |  |
| 10. Chaddock College, Quincy, Ill | $\stackrel{0}{8}$ | 0 |  |
| 11. Augustana College liock Island, Ill | 5 | 1 |  |
| 13. Taylor University, Upland, ind | 51 | 1 |  |
| 11. Amity College, College Springs, Iowa | 0 | 0 |  |
| 15. State University of Iowa. | 1 | 0 |  |
| 16. Kansas City (Kans.) University | 3 | 0 |  |
| 17. Tulane University-......... | 0 | 1 |  |
| 13. Johns Jopkins University | 83 | 0 |  |
| 19. New Windsor (Md.) College |  | 0 |  |
| 20. Boston University. | 2 | 0 |  |
| 21. Hirrard University | 35 | 0 |  |
| 23. Clark University |  | 0 |  |
| 23. University of Michigan | 4 | 0 |  |
| 21. University of Minnesota | 3 | 0 |  |
| 25. Southwest Baptist College, Bolivar, Mo | 9 | 0 |  |
| 28. Westminster College, Fulton, Mo- | 1 | 0 |  |
| 27. Washington University, St. Louis, | 2 | 0 |  |
| 23. University of Nebraska | 1 | 0 |  |
| 29. Princeton University | 3 | 0 |  |
| 33. Cornell University |  | 2 |  |
| 31. Columbia University | 20 | 1 |  |
| 32. New York University | 6 | 1 |  |
| 33. North Carolina College, Mt. Pleasant, | 0 | 0 |  |
| 34. Hiram (Ohio) College. | 0 | 0 |  |
| 35. Lima (Ohio) College. | 0 | 0 |  |
| 33. University of Wooster (Ohio) | 15 | 0 |  |
| 37. Western University of Pennsylvania | 0 | 0 |  |
| 38. Moravian College, Bethlehem, Pa | 1 | 0 |  |
| 39. Bryn Mawr College | 0 | 1 |  |
| 40. Lafayette College, Easton, Pa | 1 | 0 |  |
| 41. PennsyIvania College, Gettysburg, Pa | 1 | 0 |  |
| 42. Haverford (Pa.) College | 1 | 0 |  |
| 43. University of Pennsylvania | 14 | 1 |  |
| 44. Villanova (Pa.) College | 0 | 0 |  |
| 45. Washington (Pa.) and Jefferson Colieg | 0 | 0 |  |
| 46. Brown University - | 3 | 0 |  |
| 47. Huron (S. Dak.) College | 0 | 0 | 1 |
| 48. American University of Harriman ( | 10 |  |  |
| 49. Vanderbilt University -- | 1 | 0 | 0 |
| 50. University of Virginia | 2 | 0 | 0 |
| 51. Barboursville (W. Va.) College | 0 | 0 |  |
| 52. University of Wisconsin | 5 | 0 |  |
| Total. | 320 | 20 | 23 |

Property.-The total value of property possessed by institutions for higher education, including all colleges for women, amounts to $\$ 360,594,595$, a gain of $\$ 17,706,234$ over the amount for the preceding year. The endowment funds amount to $\$ 166,193,529$, and the remainder represents the value of grounds, buildings, apparatus, machinery, libraries, etc., used for instruction and research.

Income.-The total income for the year, excluding benefactions, amounted to $\$ 28,558,463$, derived from the following sources:
Tuition and other fees
$\$ 11,171,127$
Endowment funds
7, 045, 479
State and municipal appropriations ................................................. 4, 464,405
United States Government .......................................................... 2,984,177
From other sources ................................................................. $2,893,275$
These figures show that students pay about 39.1 per cent of the cost of their college education.

Benefactions.-The value of gifts and bequests reported as having been received by the institutions for higher education during the year amounts to $\$ 11,995,463$. The amounts reported by the institutions of the several geographical divisions of the country are as follows:

South Atlantic Division 642, 002
South Central Division. 587, 128
North Central Division 3, 950, 355
Western Division
563, 302
The institutions that received benefactions during the year amonnting to $\$ 100,000$ or over are as fol ows:

Colorado College, Colorado Springs................................................. 203,000
Wesleyan University, Middletown, Conn .........-.-................................. 100,000


Monmouth (Ill.) College .............................................................. 100,000
Drase University, Des Moines, Iowa ............................................... 115,000
Berea (Ky.) College ....................................................................... 112, 720
Massachusetts Institute of Technoogy ................................................. 482,978
Harvard University ........................................................................ 835,102
Tufts College (Mass.) .......-................................................................. 110,000
Alma (Mich.) College .....................-.............................................. 180,000
Washington University, St. Louis, Mo............................................ 193, 600
Darvmonth College, Hanover, N. H............................................... 350,000



New York University .................................................................... 352, 363
University of Cinciunati............................................................................ 115,000



Brown University, Providence, R.I .......................................................... 151,815
Converse College, Spartanburg, S. C.................................................. 103,000
Vanderbilt Universit̂y, Nashville,Tenn .-........ ............................... 150,000
Whitworth College, Tacoma, Wash...................................................... 100,000

TABIE 1．－Number of madergraduate and graduate students in public universi－ ties，colleges，and schools of technology．

| State or Territory． | Collesiate depart－ments． |  |  | Graduate departments． |  |  |  |  |  | Total number of undergraduate and graduate stu－ dents． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Resident． |  |  | Nonresident． |  |  |  |  |  |
|  | 吾 | $\begin{aligned} & \text { घं } \\ & \text { む } \\ & \text { 0 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { تूँ } \\ & \text { En } \end{aligned}$ | E. | $\begin{aligned} & \text { हैं } \\ & \text { 易 } \\ & k \end{aligned}$ | $\begin{aligned} & \text { ت゙ } \\ & \text { H } \\ & \text { E } \end{aligned}$ | $\underset{\sim}{\text { g }}$ |  |  | 烒 |  | in $\stackrel{1}{0}$ |
| United States | 25， 086 | 7，333 | 32，419 | 1，061 | $48 \%$ | 1，548 | 153 | 57 | 210 | 26，300 | \％， 877 | 34，17\％ |
| N．Atlantic Division | 5，259 | 193 | 5，452 | 28 | 4 | 32 | 0 | 3 | 3 | 5，28\％ | 200 | 5，487 |
| S．Atlantic Division | 3， 78 \％ | 256 | 4，038 | 151 | 12 | 163 | 13 | 0 | 13 | 3，916 | 268 | 4， 214 |
| S．Central Division－ | 2， $8: 20$ | 567 | 3，38\％ | $6 \%$ | 32 | 99 | 20 | 4 | 24 | 2，907 | 603 | 3，510 |
| N．Central Division． | 10，68\％ | 4． 605 | 15，288 | $6 \% 6$ | 296 | 920 | $10 \%$ | $4 \pi$ | 154 | 11，415 | 4，948 | 16，363 |
| Wesiern Division．－． | 2，543 | 1，712 | 4，255 | 189 | 143 | 33： | 13 | 3 | 16 | 2， 845 | 1． 1.858 | 4.603 |
| N．Atiantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 299 | 16 | 315 | 8 | 0 | 8 | 0 | 0 | 0 | $30 \%$ | 16 | 323 |
| New Hampshire | 116 | 9 | 12 s | 3 | 0 | 3 | 0 | 0 | 0 | 119 | 4 | 88 |
| Vermont ．－．－．－－－ | 230 | 48 | 278 | 4 | 1 | b | 0 | 0 | 0 | 234 | 49 |  |
| Massachusetts ．－ | 1，289 | 54 | 1，343 | 11 | 1 | 12 | 0 | 0 | 0 | 1，360 | 55 | 1，355 |
| Rhode Island | 58 | 21 | 79 | 0 | $\stackrel{\sim}{2}$ | 2 | 0 | 3 | 3 | 58 | 只 6 | 84 |
| Comnecticut． | 48 | 27 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | $2 \pi$ | 7.5 |
| New York． | 1，368 | 0 | 1，368 | 0 | 9 | 0 | 0 | 0 | 0 | 1，368 | 0 | 1，308 |
| New Jersey， | 195 | 10 | 105 | ${ }^{0}$ | ${ }_{0}$ | 0 | 0 | 0 | 0 | ${ }^{195}$ | 19 | 1，264 |
| Pennsylvania ．．． | 1，656 | 8 | 1， $\mathrm{C64}$ | 2 | 0 | 2 | 0 | 0 | 0 | 1，658 | 8 | 1，666 |
| S．Atlantic Division： <br> Delaware． | 94 | 8 | 102 | 4 | 0 | 4 | 0 | 0 | 0 | 98 | 8 | 106 |
| Maryland． | 374 | 0 | 381 | 0 | 0 | 0 | 0 | 0 | 0 | 374 | 0 | 374 |
| Dist．Columbia－－ | 80 | 37 | 117 | 4 | $\stackrel{2}{2}$ | 6 | 0 | 0 | 0 | 84 | 39 | 123 |
| Virginia | 920 | 0 | 990 | 54 | 9 | 54 | 0 | 0 | 0 | 1，044 | 0 | 1，044 |
| West Virginia | 177 | 106 | 283 | 31 | \％ | 38 | 0 | 0 | 0 | 203 | 113 | 321 |
| North Carotina－ | 658 | 14 | $6 \%$ | 26 | 1 | 27 | 13 | 0 | 13 | 697 | 15 | 712 |
| South Carolina－－ | 641 | 21 | ${ }^{662}$ | 25 | 0 | 25 | 0 | 0 | 0 | 666 | 21 | 687 |
| Georgia | 693 | 18 | 711 | 5 | ， | 5 | 0 | 0 | 0 | 698 | 18 | ${ }_{7} 16$ |
| Florida－－．－．．．．．． | \％ | 52 | $12 i$ | 2 | 2 | 4 | 0 | 0 | 0 | 77 | 54 | 131 |
| S．Central Division： | 205 | 51 | 303 | 5 | 4 | 9 | 0 | 0 | 0 | 260 | 55 | 15， |
| Tennessee | 269 | 90 | 359 | ${ }^{\circ}$ | 5 | 10 | 0 | 0 | 0 | 274 | 95 | 369 |
| Alabama | 506 | 30 | 536 | 19 | 3 | 22 | 0 | 0 | 0 | 525 | 33 | 558 |
| Mississippi | 442 | 40 | 432 | 7 | 2 | － | 18 | 4 | 22 | $46 \%$ | 46 | 513 |
| Louisiana． | 231 | 0 | 231 |  | 0. | 3 | 0 | 0 | 0 | 234 | 0 | 234 |
| Texas．． | 749 | $16 \%$ | 916 | 24 | $1 \%$ | 41 | （1） | 0 | 0 | 773 | 184 | 957 |
| Ariansas． | 204 | 87 | 291 | 0 | 0 | 0 | 1 | 0 | 1 | 205 | 87 | 292 |
| Oklahoma | 164 | 102 | 266 | 4 | 1 | 5 | 1 | 0 | 1 | 169 | 113 | 272 |
| Indian Territory | ， | 0 | （ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N．Central Division： | 1．231 | 587 | 1，828 | 58 | 48 | 100 | 11 | $1{ }^{\prime \prime}$ | 28 | 1，30t | 6．3 | 1，956 |
| Indiana． | 1，316 | 312 | 1，658 | $\%$ | 23 | 93 | 20 | 0 | 20 | 1，406 | 365 | 1， 771 |
| Illinois． | 615 | 283 | 858 | 33 | 3 | 36 | 32 | 4 | 36 | 680 | 290 | 970 |
| Michigan | 1，45\％ | 709 | 2，176 | 59 | 32 | 91 | 2 | 1 | 3 | 1，5：8 | 742 | 2，270 |
| Wisconsin | 1，410 | 390 | 1，800 | \％ | 24 | 96 | 0 | 1 | 1 | 1，48\％ | 415 | 1，897 |
| Minnesota | T18 | 532 | 1，250 | 124 | 53 | $17 \%$ | 0 | 0 | 0 | 812 | 585 | 1，427 |
| Iowa． | 1．139 | 331 | 1，3\％3 | 47 | 15 | 62 | 22 | 16 | 33 | 1，108 | 365 | 1，473 |
| Missouri． | 694 | 192 | 886 | 29 | 6 | 35 | 0 | 0 | 0 | \％23 | 198 | 921 |
| North Dakota． | 223 | 46 | 274 | 3 | 3 | 6 | 4 | 0 | 4 | 235 | 49 | 284 |
| South Dakota | $30 \%$ | 125 | $42 \%$ | 10 | 5 | 15 | ， | 1 | 1 | 312 | 131 | 443 |
| Nebraska | 573 | 495 | 1，0：1 | 87 | 53 | 140 | 4 |  | 8 | 664 | 555 | 1，219 |
| Kansas ．．．．．．．．．． | 1，0\％9 | 557 | 1，646 | 40 | 31 | 71 | 12 | 3 | 1．5 | 1，131 | 601 | 1，732 |
| Western Division： Montana | 67 | 54 | 121 | 0 |  | 2 | 0 | 0 | 0 | 64 | 56 | 123 |
| Wyoming | 33 | 35 | 68 | 3 | 1 | 4 | 1 |  | 1 | 37 | 36 | 73 |
| Colorado | 565 | 200 | 78. | 27 | 6 | 33 | 0 | 0 | 0 | 592 | 226 | 818 |
| New Mexico | 45 | 0 | 67 | ， | ， | ， | 2 |  | 2 | 49 | 23 | $7 \%$ |
| A rizona | 31 | 23 | 53 | 3 | 1 | 4 | 0 | 0 | 0 | 34 | 23 | 57 |
| Utah | 104 | 74 | 178 | $\stackrel{3}{2}$ | 4 | 11 | 0 | 0 | 0 | 106 | 79 | 18.5 |
| Nevada | 91 | 85 | 176 | $\%$ | 4 | 11 | 0 | 0 | 0 | 98 | 89 | 187 |
| Idaho． | 59 | 47 | $10 \%$ | ${ }^{0}$ | 8 | 0 | 0 | 0 | 0 | 59 | 47 | 106 |
| Washing | $30 \%$ | 162 | 469 | $1{ }^{10}$ | 8 | 25 | 4 | 2 | 6 | 328 | 172 | 500 |
| Oregon－．．．－ | 274 | 17.1 |  | 10 | 16 | ${ }^{26}$ | 3 | 1 | 3 | 1． 290 | 188 | － 478 |
| California．．－ | 964 | 819 | 1， 883 | 118 | 99 | 217 | 3 | 1 | 4 | 1，085 | 919 | 2，004 |

Table 2．－Number of undergraduate and graduate students in private miversities， colleges，and schools of technology．

| State or Territory． | Collegiate depart－ments． |  |  | Graduate departments． |  |  |  |  |  | Total number of undergraduate and graduate stu－ dents． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Resident． |  |  | Nonresident． |  |  |  |  |  |
|  | $\begin{aligned} & \text { घं } \\ & \text { 鬲 } \end{aligned}$ | $\begin{gathered} \text { घ } \\ \text { E } \\ \text { B } \end{gathered}$ | $\begin{aligned} & \text { rã } \\ & \text { स̃ } \\ & \text { E- } \end{aligned}$ | 淢 | $\begin{aligned} & \text { 号 } \\ & \text { ह゙̈ } \\ & \text { B } \end{aligned}$ |  | 琺 | $\begin{aligned} & \text { ह̈ं } \\ & \text { ह̈ } \\ & \text { \| } \end{aligned}$ |  | 号 | $\begin{aligned} & \text { घं } \\ & \text { 荡 } \\ & \text { B } \end{aligned}$ | $\begin{aligned} & \text { تी } \\ & \text { H2 } \\ & \text { E- } \end{aligned}$ |
| United States ． | 42， 981 | 28， 718 | 71，679 | 3，051 | 1，232 | 4，283 | 702 | \％1 | \％ 78 | 46，${ }^{1} 14$ | 30，021 | 70， 783 |
| N．Atlantic Division S．Atlantic Division＿ S．Central Division． N．Central Division Wostern Division．． | 19,302 4,525 4,904 12,188 1,992 | 7,654 5,518 6,335 8,139 1,072 | 26,956 10,043 11,289 $20,3 \% 4$ 3,064 | $\begin{array}{r} \hline 1,641 \\ 378 \\ 72 \\ 899 \\ 69 \\ 61 \end{array}$ | 589 81 93 46.2 $46 \%$ 60 | $\begin{array}{r} 2,170 \\ 459 \\ 165 \\ 1,361 \\ 123 \end{array}$ | $\begin{array}{r} 253 \\ 45 \\ 57 \\ 337 \\ 10 \end{array}$ | $\begin{array}{r}23 \\ 0 \\ 6 \\ 41 \\ 41 \\ \hline\end{array}$ | $\begin{array}{r} 276 \\ 45 \\ 63 \\ 378 \\ 11 \end{array}$ | 21,196 4,918 5,083 13,424 2,043 | $\begin{aligned} & 8,800 \\ & 6,5,99 \\ & 0,434 \\ & 8,642 \\ & 1.140 \end{aligned}$ | $\begin{aligned} & 29,402 \\ & 10,547 \\ & 11,517 \\ & 22,546 \\ & 3,20,203 \end{aligned}$ |
| N．Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine ．．．．．．．．．．． | 510 | 211 | 751 | 0 | \％ | 5 | 0 | 0 | 0 | 540 | 16 | \％ |
| New Hampshire | $6 \pm 6$ | 0 | 646 | 5 | 0 | 5 | 0 | 0 | ， | 651 | 0 | 51 |
| Vermont ．．．．．．－． | 146 | 53 | 202 | 0 | 0 | ） | 0 | 0 | ， | 146 |  | $20 \%$ |
| Massachusetts ．－ | 4，144 | 3，234 | 7，368 | 459 | 123 | 582 | 14 | 10 | 14 | 4， 617 | 3，347 | 7，964 |
| Rhode Island． | －631 | 15. | ${ }^{783}$ | 26 | 2 | $4{ }^{40}$ | 28 | 9 | 37 | －685 | 183 | － 868 |
| Connecticut | 2，115 | 58 | 2，1\％3 | 209 | 48 | 257 | 48 | 0 | 43 | 2， $37 \%$ | 105 | 2，478 |
| New York | 5，018 | 2，185 | 7，203 | 633 | 220 | 853 | 65 | 0 | 11 | 5， 716 | 2，411 | ¢，127 |
| New Jersey－ | 1，6\％8 |  | 1，633 | 132 | 1 | 133 | 13 | ${ }_{8}$ | ${ }_{93} 13$ | 1，733 |  | 1，779 |
| Pennsylvania | 4，43． | 1，763 | 6，197 | $17 \%$ | 11.1 | $28 \%$ | 85 | 8 | 93 | 4，606 | 1，881 | 6，5\％\％ |
| Delaware．．． | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Maryland． | 800 | 733 | 1，533 | 186 | 5 | 191 | 3 | 0 | 3 | 989 |  | 1， 2.27 |
| Dist．Columbia | 418 | 107 | 唉 | 163 | 13 | 176 | 6 | 0 | 6 | 587 | 120 | 20\％ |
| Virginia | 813 | 936 | 1，750 | ， | 8 | 12 | 13 | 0 | 13 | 830 | 945 | 1， 025 |
| West Virginia | 35 | 120 | 156 | 4 | 0 | 4 | 0 | 0 | （ | 40 | 120 | 160 |
| North Carolina | 1，086 | 1，019 | 2，105 | 20 | 9 | 89 | 13 | 0 | 13 | 1，119 | 1，028 | 2，147 |
| South Carolina | 572 | 1，094 | 1，666 | 1 | 21 | $2 \%$ | 10 | 0 | 10 | 583 | 1，115 | 1，698 |
| Georgia | 735 | 1，472 | 2，207 | 0 | \％ | $2 \%$ | 0 | 0 | （ | 335 | 1，991 | ：2， 22.1 |
| Florida ．．．．．．．．．． | 65 | 36 | 101 | 0 | 3 | 3 | 0 | 0 | 0 | 65 | c9 | 1）4 |
| S．Central Division： Kentacky | $93 \%$ | 988 | 1，92\％ |  | 20 |  |  | 1 |  |  |  |  |
| Tennessce | 1，415 | 1，878 | 3，3226 | 42 | 21 | 63 | 45 | \％ | 47 | 1，525 | 1，901 | 3，436 |
| Alabama | $6 \pm 3$ | を\％3 | 1，464 | 6 | 20 | 28 | 0 | ， | 0 | 649 | ． 845 | 1，4．91 |
| Mississippi－－－－－ | 326 | 1， 26 | 1，588 | ， | 3 | 6 | 0 | 0 | 0 | 329 | 1， 265 | 1，584 |
| Louis ana | 509 | 3 | 863 | 7 | 17 | 24 | $\stackrel{9}{\sim}$ | 0 | 0 | 513 | 379 | 89\％ |
| Texas．．． | 8 | 720 | 1，545 | 6 | 10 | 16 | \％ | ， | 10 | 838 | 733 | 1，511 |
| Arkansa | 253 | 285 | 538 | 0 | ， | 0 | 0 | 0 | 0 | 233 | 885 | 538 |
| Oklahoma | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | （） |
| Indian Territory | 16 | 17 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 13 | S3 |
| N．Central Division： <br> Ohio | 2，386 | 1，593 |  |  | 32 |  | 33 | 1 |  | 2，475 | 1，626 | 4，101 |
| Indiana | 1，43？ | 416 | 1， 253 | 47 | 14 | 61 | 153 | 4 | $15 \%$ | 1． 68 | ， 434 | 2,01 |
| Illinois | 3，015 | 2,240 | 5，235 | 697 | 365 | 1，062 | 37 | 5 | 4. | 8，749 | 2,610 | 6，859 |
| Michigan | 561 | 350 | 917 | 5 | 2 | 7 | 15 | 9 | $\cdots$ | 581 | 36 | 9 |
| Wisconsin | 600 | 293 | 883 | 10 |  | 17 | 32 | 1 | 33 | 642 | 231 | 873 |
| Minnesota | $55 \%$ | 237 | $8 \% 0$ | 0 | ${ }_{0}$ |  | 13 | 4 |  | 586 | 21 | $83 \%$ |
| Towa | 1，255 | 790 | 2，045 | $2{ }^{2}$ | 1：3 | $3!$ | 13 | 5 | 18 | 1，290 | 807 | 2，09\％ |
| Missouri | 1，882 | 1，512 | 2，794 | 60 | 16 | \％ 7 |  | 0 | 24 | 1，366 |  | 2,295 |
| North Dakota． | 18 | 16 |  | 0 | 0 | ${ }^{1}$ | 0 | （1） | 0 | 18 | 16 |  |
| South Dakota－ | 85 | 45 | 130 | 0 | 0 | 0 | 0 |  | 0 | 85 | 45 | 130 |
| Nebraska．－．．．． | 313 | $21 \pm$ |  | 0 | 3 | 3 | ${ }^{0}$ | 0 | 0 | 313 | 2178 | 1， 191 |
| Kanses－－．．．．．． | 633 | 467 | 1，154） | 2 | 10 | 1：2 | 17 | 12 |  |  |  | 1，191 |
| $\begin{aligned} & \text { estern Divi } \\ & \text { Montana } \end{aligned}$ |  |  | 10 | 0 |  | 0 | 0 | 0 | 0 |  |  | 10 |
| Wyoming | 0 | 0 |  | 0 | 0 | 0 | 0 |  | 1 | 0 | O |  |
| Colorano | 295 | 971 | 5 ES | 0 | 0 | 0 | 10 | 1. | 11 | 305 | $27 / 2$ | 577 |
| New Mexico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ， | 0 | ， | 0 | 0 |
| Arizona ．－．．． | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Utah． | 15 | 5 | 2） | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 5 | 20 |
| Nevada |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Idaho | ， | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ${ }^{( }$ | 0 | 0 | ${ }^{0}$ |
| Washingt | 179 | 20 | 199 | 1 | 1 | 3 | 0 | 0 | 0 | 180 | 20 | 20. |
| Oregon－－ |  | 123 |  | 2 | 6 | 1 | 0 | ${ }_{0}^{0}$ | 0 | － $15{ }^{152}$ | 123 | －275 |
| California | 1，345 | 659 | 1，99\％ | 58 | 63 | 124 | 0 | 0 | 0 | 1，403 | \％18 | 2，121 |

Table 3.-Nimber of undergraduate students in universities and colleges for men and for both sexes (Table 29).

| State or Territory. | Colleges for men. |  | Coeducational colleges. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Institutions. | Undergraduate students. | Institutions. | Undergraduate students. |  |
|  |  |  |  | Men. | Women. |
| United States | 136 | 23,788 | 344 | 34, 148 | 19,193 |
| North Atlantic Division | 48 | 14, 768 | 37 | 7,045 |  |
| South Atlantic Division | 31 | 3,485 | 43 | 2,924 | 978 |
| Soath Central Division | 19 | 1,228 | 66 | 4,825 | 2,533 |
| North Central Division. | 32 | 3,071 | 163 | 16,336 | 10,630 |
| Western Division ...... | 6 | 686 | 35 | ?,118 | 2, 393 |
| North Atlantic Division: |  |  |  |  |  |
| Maine ${ }^{\text {a }}$......... | 1 | 241 | 3 | 588 | 205 |
| New Hampshire | 2 | 646 | ${ }_{0}^{0}$ | ${ }^{0}$ | 0 |
| Verinont...-. | 1 | 79 | $\stackrel{\%}{\sim}$ | 997 | 104 |
| Massachusetts | ${ }_{6}^{6}$ | 3,565 | 3 | 93 | 417 |
| Rhode Island. | 0 2 2 | 1,850 | 1 | 631 865 | 15\% |
| New York. | $1 \underset{\sim}{2}$ | 3,5\%2 | 6 | $2,28 \%$ | 853 |
| New Jersey | 5 | 1,405 | 0 |  | 0 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Maryland. | 7 | 747 | 4 | 146 | $12 \%$ |
| District of Columbia | 4 | 18.3 | 3 | 316 | 144 |
| Virginia | \% | 43 | 4 | 319 | 36 |
| West Virginia. | 0 | 0 | 3 | 213 | 135 |
| North Carolina | 5 | ${ }^{623}$ | 10 | 800 | 173 |
| South Caroina. | $\stackrel{2}{4}$ | 147 | $\underset{4}{7}$ | 631 | 197 |
| Fiorida.. |  |  | 4 | 106 | 198 |
|  |  |  |  |  |  |
| Kentucky - | 4 | 314 | 9 | 878 | 352 |
| Tennessee | 4 | 337 | 20 | 1,380 | 879 |
| Alabama- | 3 | 321 | ${ }_{6}^{6}$ | 501 | 223 |
| Mississippi | 1 | 190 | 3 | 315 | 33 |
| Louisiana | 3 | 482 | 5 | 255 | 187 |
| Texas ...- | 4 | 181 | 12 | 1,000 | 491 |
| Arkansas | 0 | 0 | 8 | 457 | $33 \%$ |
| Oklahoma Indian Territory | 0 | 0 | 1 | 23 | 19 |
| Indian Territory North Central Division: | 0 | 0 | 2 | 16 | 17 |
| North Central Division: <br> Ohio |  |  |  |  |  |
| Indiana- | 4 | 688 | 9 | 1,219 | 1,985 |
| Iliinois | 7 | 713 | 24 | 2,587 | 2,299 |
| Michigan | 1 | 83 | 8 | 1,411 | 956 |
| Wisconsin | 3 | 234 |  | 1,776 | 573 |
| Minnesota | 2 | 194 | 7 | 1,077 | 785 |
| Iowa .... | ${ }_{5}$ | 218 | 22 | 1,476 | 1,005 |
| Missouri -.... | 5 | 448 | 21 | 1,528 | 837 |
| North Dakota | 0 | 0 | 3 | ${ }^{67}$ | 36 |
| South Dakota | 0 | 0 | 5 | 133 | 89 |
| Nebraska...... | 1 | 61 | 9 | 825 | 712 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| W yoming. | 0 | 0 | 1 | 33 | 35 |
| Colorado. | 1 | 30 | 3 | 446 | 406 |
| New Mexico | 0 | 0 | 1 | 12 | 2 |
| Arizona- | 0 | 0 | 1 | 31 | 22 |
| Utah | 0 | 0 | 4 | 57 | 44 |
| Nevada. | 0 | 0 | 1 | 91 | 85 |
| Idaho. | 0 | 0 | 1 | 59 | 47 |
| Washington | 2 | 135 | 5 | 243 | 150 |
| Oregon | ${ }_{3}^{0}$ | ${ }^{0}$ | $\stackrel{7}{9}$ | +220 | 157 |
| Caliîornia | 3 | 421 | 9 | 1,888 | 1,405 |

TABLE 1.-Classifcation of universities and colleges for men and for both sexes (Table 29) according to the number of undergraduate students.


Tadee 5.-Classification of universities and colleges for men and for both sexes (Table 29) according to amount of endoument funds.


TABLE 6.-Professors and instructors in unirersities and colleges for men and for both sexes.

| State or Territorj. |  | Preparatory departments. |  | Collegiate departments. |  | Professional departments. |  | Total number (excluding duplicates). |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Men. | Women. | Men. | $\begin{aligned} & \text { Wo- } \\ & \text { men. } \end{aligned}$ | Men. | Women. | Men. | TVOmez. |
| United States | 480 | 2,32: | 980 | \%, $3 \pm 46$ | $83 \%$ | 4,598 | 05 | $12,60 \frac{1}{2}$ | 1.816 |
| North Atlantic Division | 85 | 374 | 97 | 2,443 | \% 6 | 1,419 | 6 | 4, 044 | 184 |
| South Atlantic Division. | $7 \frac{1}{2}$ | 240 | 107 | 812 | 80 | 39:3 | 2 | 1,333 | $1 \% 9$ |
| South Central Division.- | 85 | , 253 | 184 | 731 | 16.$)$ | - 587 | 5 | 1, 425 | 355 |
| North Central Division. | 195 | 1,203 | 489 | 2,729 | 454 | 1,560 | 45 | 4,780 | 9:9 |
| Western Division ...... | 41 | $25 \%$ | 103 | 631 | 87 | , 330 | \% | 1, (8) | 169 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine......---.-.--- |  | 0 | 0 | 95 | 4 | 32 | 0 | 121 |  |
| New Hampshire .-... | $\stackrel{2}{2}$ | 8 | 0 | 56 | 0 | 16 | 0 | 80 |  |
| Vermont .-...-... | 3 | 0 | 0 | 51 | 0 | 27 | 0 | 83 |  |
| Massachusetts | 9 | 35 | 2 | 440 | 4 | 388 | 5 | 816 | 11 |
| Rhode Island. | 1 | 0 | 0 | 70 | 2 | 0 | 0 | 70 |  |
| Connecticut. | 3 | 0 | 0 | 230 | 0 | $9 \%$ | 0 | 317 |  |
| New Yorlk... | 23 | $18 \%$ | 50 | 79\% | 23 | 538 | 1 | 1, 4 41 | 81 |
| New Jersey | 5 | 26 | 5 | 131 | 0 | 5 | 0 | 150 | 5 |
| Pennsylvania | 83 | 123 | 40 | $5 \%$ | 43 | 314 | 0 | 957 | \% 8 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Delaware | $\stackrel{2}{1}$ | 2 | 1 | 20 | 0 | 0 | 0 | 21 | 1 |
| Maryland. | 11 | 76 | 8 | 183 | 13 | 55 | 1 | 376 | 16 |
| District of Columbia | 7 | 34 | 4 | 140 | 7 | 223 | 1 | 405 | 15 |
| Virginja .......-.-.-. | 11 | 26 | 9 | 118 | 3 | 48 | 0 | 168 | 9 |
| West Virginia | 3 | 13 | 4 | 49 | 9 | 1 | 0 | 59 | 11 |
| North Carolina. | 1.5 | 28 | 21 | $12 \%$ | 13 | 41 | 0 | 169 | 32 |
| South Carolina | 9 | 16 | 21 | 68 | 3 | 4 | 0 | 86 | 2 |
| Georgia | 11 | 20 | 23 | 11 | 20 | $1 \%$ | 0 | 95 | 40 |
| Florida - | 5 | 25 | 16 | 36 | 12 | 3 | 0 | 51 | 31 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Kentaciky | 13 | 34 | 3.3 | 93 | 14 | 111 | 1 | 350 | 53 |
| Tennessee | 24 | 65 | 58 | 290 | 55 | 204 | 1 | 514 | 11. |
| Alabama | 9 | 13 | 12 | 91 | 6 | $\therefore 6$ | 0 | 119 | 21 |
| Mississippi | 4 | 13 | 5 | 36 | 3 | 9 | 0 | 51 | $\sim 1$ |
| Louisiana. | 8 | 24 | 30 | 86 | 14 | 42 | 0 | 143 | 43 |
| Texas . | 16 | 64 | 19 | 130 | 36 | 65 | 3 | :32 | 70 |
| Arkansas | 8 | $: 3$ | 19 | 54 | $1 \%$ | 23 | 0 | 93 | 2 ? |
| Oklahoma | 1 | 11 | 1 | 10 | 1 | 4 | 0 | 15 | 1 |
| - Indian Territory .-... | 2 | 4 | 8 | 6 | 14 | 0 | 0 | 8 | 19 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohì | 31 | 201 | \% 6 | 463 | 7 | CO3 | 1. | 909 | 154 |
| Indiana . | 13 | 17 | 23 | 206 | 15 | 9 | 0 | 96) | 39 |
| Tllinois .-. | 31 | 198 | $\%$ | 576 | \% ${ }^{1}$ | 409 | $\cdots$ | 1.107 | $18 \sim$ |
| Wichigan | 9 | 47 | 23 | 193 | 2\% | 119 | 3 | 298 | 53 |
| Wisconsin | 10 | $6{ }^{61}$ | 16 | 207 | 32 | 43 | 0 | $27 \%$ | 42 |
| Minnesota | 9 | \%3 | 17 | 183 | \%8 | 212 | 4 | 381 | 45 |
| Inwa | 25 | 160 | 78 | 258 | \% ${ }^{2}$ | 101 | 3 | 350 | 121 |
| Missouri | 26 | 135 | 80 | 238 | $3: 3$ | 106 | 0 | 444 | 110 |
| Norch Dakota | 3 | 21 | 9 | \% | 9 | 17 | 0 | 44 | 10 |
| South Dakota.. | $\overline{5}$ | 38 | 21 | 38 | 16 | 0 | 0 | 48 | 26 |
| Nebraska | 10 | 60 | 31 | 140 | 35 | 118 | 1 | 290 | 5 |
| Kansas ------------- | $\because 0$ | 129 | 43 | 204 | 41 | 109 | 6 | 36 |  |
| Western Division: |  |  |  |  |  |  |  |  |  |
| MIontana-.--... |  | 13 | 10 | 12 | 9 | 0 | 0 | 16 | 13 |
| W yoming | 1 | 13 | 3 | 13 | 3 | 0 | 0 | 13 | 1 |
| Colorado | 4 | 49 | 10 | 85 | 10 | $1: 3$ | 5 | 241 | 2 |
| New Mexico | 1 | 10 | 2 | 12 | 2 | 0 | 9 | 12 |  |
| Arizona ---- | 1 | 6 | $\%$ | 12 | 4 | 0 | 0 | 15 |  |
| Utah | 4 | 39 | 11 | 3.3 | 5 | 0 | 0 | 5: | 12 |
| Nevada | 1 | 5 | 4 | 21 | 4 | 0 | 0 | 21 |  |
| Idaho | I | 3 | $\%$ | $1: 3$ | 4 | 0 | 0 | 15 | $6$ |
| Washington | $\underset{\sim}{i}$ | 43 | 11 | 68 | 10 | 8 -8 | 0 | 83 | 13 |
| Oregon .... | 7 | 16 | 14 | 51 | 11 | 59 | 0 | 139 | 28 |
| California . | 12 | 55 | 29 | 313 | $\because 5$ | 137 | $\because$ | 485 | 58 |

Table \%.-Síudents in universitics and colleges for men and for both sexes.

|  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |

Tabie 8.-Students pursuing various courses of study in universities and colleges for men and for both sexes.


Table 9.-Degrees conferret on men by universities and colleges for men and for both sexes.


Table 10.-Degrees conferred on men by universities and colleges for men and for both sexes--Continued.


Table 11.-Degrees conferred on women by universities and colleges for both sexes.

| State or Territory. | $\begin{aligned} & \text { ஷ } \\ & \dot{<} \end{aligned}$ | $\begin{aligned} & \dot{\omega} \\ & \dot{\sim} \end{aligned}$ | $\begin{aligned} & \dot{q} \\ & \dot{\sim} \dot{\sim} \end{aligned}$ | $\stackrel{\text { i }}{\infty}$ |  |  | $\begin{aligned} & \text { rid } \\ & \text { A } \\ & \text { a } \end{aligned}$ | $\begin{aligned} & \dot{\Delta} \\ & \dot{H} \\ & \dot{\text { in }} \end{aligned}$ | $\begin{gathered} \dot{0} \\ \dot{\circ} \end{gathered}$ | $\begin{aligned} & \dot{j} \\ & \dot{y} \\ & \dot{4} \\ & \text { i } \end{aligned}$ | $\begin{aligned} & \text { - } \\ & \text { - } \end{aligned}$ | $\begin{aligned} & \dot{x} \\ & \underset{B}{2} \end{aligned}$ | $\begin{aligned} & \dot{\nexists} \\ & \dot{\vec{A}} \end{aligned}$ | $\begin{aligned} & \text { H } \\ & \text { rin } \end{aligned}$ |  |  | $\begin{aligned} & \dot{A} \\ & \dot{\sim} \\ & \dot{\sim} \end{aligned}$ | a |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | 1,054 | 349 | $50 \%$ | 359 | 6.2 | 8 | 1.3 | 80 | 3 | 1 | 150 | 14 | 6 | 11 | 2 | 8 | 1 | 18 |
| North Atantic Division | 210 | 45 | 109 | 35 | 18 | 4 |  |  |  | 1 | $2 \%$ | 2 |  |  |  | 8 | 1 |  |
| South Atlantie Division. | 46 | 17 | 3 | 7 | 4 |  | 1 |  |  |  | 10 |  |  |  | 2 |  |  | 1 |
| South Central Division... | 65 | 54 | 14 | 12 | 4 | , | 73 |  | 1 |  | 16 | 3 | \% | 1 |  |  |  |  |
| North Central Division. | 600 | 198 | 304 | 253 | 25 | 3 | 哭 | 20 | 1 |  | 41 | ${ }^{8}$ | 4 | 7 |  |  |  | 6 |
| Western Division....... | 133 | 35 | 17 | 53 | 11 |  | 22 |  | 1. |  | 12 |  |  | 3 |  |  |  |  |
| North Atlantic Division: <br> Maine | 41 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vermont. | 7 | 11 | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Massachusetts | 55 |  | 17 | 1 |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |
| Rhode lsland. | 18 |  | 19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Connecticut <br> New York | 46 | 2. | 4.9 | 8 | 1 | 4 |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
| Pennsylvania | 33 | 12 | 15 | 26 | 8 |  | -- |  |  | 1 | 19 |  |  |  |  | 8 | 1 | 1 |
| South Atlantie Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maryland | 9 |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |
| District of Columbia | 4 | 3 |  | 2 |  |  | - | - |  |  | 4 |  | - |  |  |  |  | 1 |
| Virginia. | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| West Virginia | 8 |  | 1 | 1 | 4 |  |  |  |  |  | 1 |  |  |  | 2 |  |  |  |
| North Carclina | 8 | 3 | 2 | 2 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |
| South Carolina | 1 | 6 |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |
| Georgia | 1.2 | 8 |  |  |  |  | 1 | .. |  |  |  |  |  |  |  |  |  |  |
| Florida .- | , | 2 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky --........ | 8 | ${ }^{9}$ |  | 3 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| Alabama | 2 | 6 | ) |  | 4 | 1 | 1 | - | 1 |  | 3 | 1 |  |  |  |  |  |  |
| Mississippi | 3 | 1 | 1 | .. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Louisiana | 13 | 6 |  |  |  |  |  |  |  |  | 1 |  | 2 |  |  |  |  | 1 |
| Texas .-. | 8 | 8 | 1 | 9 |  |  |  |  | - |  | 4 |  |  | 1 |  |  |  |  |
| Arkansas | ${ }_{6}^{6}$ | $?$ | 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Indian Territory .-. | 1 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Neith Central Division: <br> Ohio | 116 | 2 | 81 | 50 |  |  | 1 |  |  |  | 12 |  |  | 1 |  |  |  |  |
| Indiana... | 57 | 3 | 35 | 8 | 8 |  |  |  |  |  | 8 |  |  |  |  |  |  |  |
| Inlinois. | 117 | 44 | 66 | 23 | 3 |  |  | 20 |  |  | 19 | 4 | 3 |  |  |  |  | 5 |
| Michigan | 43 | 23 | 55 | 4 |  |  | 9 |  | - |  | 14 |  |  |  |  |  |  |  |
| Wisconsin | 17 | 13 | $2{ }^{1}$ | 43 |  |  |  |  |  |  |  | \% |  | 3 |  |  |  |  |
| Minnesot | 17 | 18 | 12 | 46 | 5 |  |  |  |  |  | 1 |  |  | 2 |  |  |  |  |
| Iowa.- | 50 | 30 | 71 | 1 | 10 |  | ${ }^{6}$ | -- | 1 |  | 12 |  | 1 |  |  |  |  |  |
| Missouri | 27 | 18 | G | 29 |  |  | 3 |  |  |  | 5 | 1 |  | 1 |  |  |  |  |
| North Dakota. | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| South Dakota Nebraska..... | 3 | 1 | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nebraska. | 68 | 14 | , | 6 |  |  |  |  |  |  | , |  |  |  |  |  |  |  |
| Western Division: | 78 | 4 | 6 | 3 | 4 | 3 | 3 |  |  |  | 6 | 1 |  | 1 |  |  |  |  |
| Western Division: Montana | $\ddot{\sim}$ | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wyoming -- | 2 |  |  |  |  |  | 7 |  |  |  |  |  |  |  |  |  |  |  |
| Colorado . | 2 |  | 8 | 1 | 3 |  |  | -- | 1 |  | : |  |  |  |  |  |  |  |
| Arizona |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Utah | 3 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nevada | 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Washingt | 11 | $\stackrel{2}{2}$ |  |  |  |  | 14 |  |  |  | 2 |  |  |  |  |  |  |  |
| Cregon - | 8 |  |  | 5 |  |  | 1 | -- |  |  | A |  |  |  |  |  |  |  |
| Cahifornia | , 4 | 23 | 7 | 46 | 8 | . |  |  |  | -- | 6 | 1 |  | 3 |  |  |  | 1 |

Table 12．－Honorary degrees conferred by universities and colleges for men and for both sexes．

| State or Territory． | $\dot{A}$ | $\begin{aligned} & \dot{A} \\ & \text { 合 } \end{aligned}$ | $\begin{aligned} & \dot{A} \\ & \dot{a} \\ & \dot{a} \end{aligned}$ | $\begin{aligned} & \dot{A} \\ & \dot{E} \\ & \dot{\sim} \end{aligned}$ | $\begin{aligned} & \dot{H} \\ & 0 \\ & 0 \\ & A \end{aligned}$ | $\begin{aligned} & \dot{\theta} \\ & \dot{4} \\ & \dot{\mu} \end{aligned}$ | $\begin{aligned} & \dot{A} \\ & \text { 号 } \\ & \text { H } \end{aligned}$ | $\begin{aligned} & \dot{A} \\ & \dot{U} \\ & \dot{U} \end{aligned}$ |  | $\begin{aligned} & \dot{A} \\ & \dot{B} \end{aligned}$ | $\begin{aligned} & \text { 穴 } \\ & \dot{4} \end{aligned}$ | $\begin{aligned} & \text { w } \\ & \text { ed } \\ & \text { el } \end{aligned}$ | $\begin{gathered} \text { ni } \\ \dot{d} \end{gathered}$ | $\left\lvert\, \begin{gathered} \underset{~ i}{c} \\ \underset{y}{4} \\ \dot{8} \\ 0 \end{gathered}\right.$ | $\begin{aligned} & \dot{A} \\ & \dot{0} \\ & \dot{D} \end{aligned}$ | $\begin{aligned} & \text { 臽 } \\ & \text { 苝 } \end{aligned}$ | $\begin{aligned} & \oplus 1 \\ & \perp \\ & -1 \end{aligned}$ | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | 273 | 101 | 23 | 6 | 2 | 8 | 9 | 10 | 1 | 4 | 180 | 7 | 6 | 1 | 1 | 2 | 1 | 1 |
| North Atlantic Division | 78 | 84 | 5 | 6 |  | 6 | 5 | 8 | 1 |  | 84 | 3 |  |  |  | 2 |  |  |
| South Atlantic Division | 47 | 20 | 2 |  |  | 1 |  |  |  |  | 20 | 1 |  |  |  |  |  |  |
| South Central Division． | 39 | 10 |  |  | 2 |  | 1 |  |  |  | 29 | 1 | 6 |  |  |  |  |  |
| North Central Division． | 104 | 46 | 16 |  | －． | 1 |  | 2 | － | 4 | 42 | 2 |  | 1 | 1 |  | 1 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine－．．．．－．．．．．． | 5 | 7 |  |  |  |  |  |  | 1 | ．．． | 1 |  |  |  |  |  |  |  |
| New Hampshi | 3 | 2 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |
| Vermont | 4 | 9 |  |  |  |  |  | 1 |  |  | 3 |  |  |  |  |  |  |  |
| Massachusetts | 7 | 11 |  | 2 |  |  | 4 | 1 |  |  | 13 |  |  |  |  |  |  |  |
| Connecticut | 8 | 6 |  |  |  |  |  |  |  |  | 13 |  |  |  |  |  |  |  |
| New York． | 17 | 20 |  | 3 |  | 3 |  | 2 | － | ．．． | 30 | $\frac{1}{2}$ |  |  |  | 2 |  |  |
| New Jersey | 4 | 6 |  |  |  | 2 |  |  |  |  | ${ }^{6}$ | 2 |  |  |  |  |  |  |
| Pennsylvania South Atlantic Division： | 30 | 18 | 5 | 1 |  | 1 | 1 | 4 |  |  | 18 |  |  |  |  |  |  |  |
| South Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Delaware |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 4 | 4 |  |  |  |  |  |  | － |  | 8 |  |  |  |  |  |  |  |
| Vistrict of Colum | $\underset{7}{2}$ | ${ }_{6}$ |  |  |  | 1 | － |  | － |  | 8 |  |  |  |  |  |  |  |
| West Virginia | 2 |  | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |
| North Carolina | 16 | ， | 1 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |
| South Carolina | 10 | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Georgia | 6 | ＊ |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |
| Kentucky | 4 | 1 |  | － | ， |  |  |  |  |  | 17 | 1 |  |  |  |  |  |  |
| Alabama | 18 | 1 |  | － | 2 |  | 1 |  |  |  |  |  | 4 |  |  |  |  |  |
| Mississippi | 5 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Louisiana | 8 |  |  |  |  |  |  |  |  |  | 6 |  | 2 |  |  |  |  |  |
| Texas．．．． | 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arkansas | 3 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio | 12 |  | 1 |  |  |  |  | 8 |  |  | 8 |  |  |  |  |  | 1 |  |
| Illinois | 18 | 9 | 6 | － |  | －1 | 1 |  |  | 4 | 11 |  |  | 1 | 1 |  |  |  |
| Michigan | 3 | \％ |  |  |  |  |  |  |  |  | 8 |  |  |  |  |  |  |  |
| Wisconsin | 7 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Minnesota | 4. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iowa．． | 10 | 2 | 1 |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |
| Missouri | 10 | 4 | 1 |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |
| South Dako | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nebraska | 1 | 1 |  | － |  | －． |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Divis | 11 |  |  | －－ |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |
| Colorado | 1 | 1 |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |
| Washington－ | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| California． | 2 |  |  |  |  |  |  |  |  |  | \％ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Tafle 13.-Property of universities and colleges for men and for both sexes.

| State or Territory. |  |  | Libraries. |  |  | Value of scientific арраratus. | Value of grounds and buildings. | Productive funds. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Vol- <br> umes. | Pamphlets. | Value. |  |  |  |
| United States.-...- | 476 | 7,6197 | 7, 876.073 | 1,878, 932 | 510, 688, 398 | 315, 136, 181. | \$136, 336, 871 | 8147, 385, 821 |
| North Atlantic Division. | 206 | 3,8863 | 3, 565, 351 | 975, 936 | 4, 834, 559 | 6, 638, 612 | 60, 390, 497 | 72, 6556, 021 |
| South Atlantic Dirision. | 50 | 1,132 | 869, 9\% | 239, 713 | 1,212,880 | 909, 37\% | 13, 925, 083 | 9, 643, 023 |
| Soath Central Division.. | 37 | 848 | 683, $43 \%$ | 139, 671 | 745, 050 | 1,095, $34 \%$ | 11,026, 718 | 8,322,104 |
| North Central Division. | 174 | 1,454 | 2, 415,5:8 | 394, 023 | 3, 357,02t | 5,110, 118 | 41,093, 926 | 34, $0{ }^{7} 1,300$ |
| Western Division...- | 9 | 298 | 398,78\% | 139, 124 | 338,485 | 1,352. $72 \%$ | 9,900, 63' | 22,693, 363 |
| Nor th Atlantic Division: |  |  |  |  |  |  |  |  |
|  | - | 311 | 1 $+2,000$ |  | 19 |  |  |  |
| Vew Hampshire | 0 | 200 | 88, 000 | 20, 200 | 88, 009 | 110,009 | 900,000 | 300, 000 |
| Vermont | 0 | 190 | 88, 933 | 36, 500 | 131, 600 | ? 7,500 | 785,000 | 825,500 |
| Massachnsetts | 43 | 653 | 799.261 | 464, 82\% | 956, 000 | 1,939,800 | 8,818,946 | 18, 649.883 |
| Rhode Islavd | 1 | 100 | 110,000 | 25,000 | 240,000 | 90,650 | 1,17\%,567 | 1,297,288 |
| Connecticut | 25 | 111 | 407,225 | 26,335 | 490,000 | 667,935 | 6. 731,300 | 7,071,349 |
| New York | 68 | 1,584 | 11, 056, 134 | 16\%, 668 | 1,796,389 | 1,867, \%91 | 23, 142, 067 | 27,0\%7, 450 |
| New 3erse | 11 | 115. | 219,581 | 10, C00 | 2\%5, 800 | 680,000 | 4,046,500 | 2,816,517 |
| Pennsylvania | 45 | 369 | 653,220 | $19 \%$, $3 \% 1$ | 713, 170 | 1.059,436 | 13,557, 817 | 10,908,841 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |
| Delaware Maryland | 29 | 299 | 201,900 | 105, 2,650 | 30,400 265,810 | 49,006 | $\begin{array}{r} 95,500 \\ 2,0,0,22 i \end{array}$ | $\begin{array}{r} 83,000 \\ 3,405,000 \end{array}$ |
| District of Columbia- | $\cdots$ | 130 | 155,186 | 61, 354 | 156, 000 | 1\%2,550 | 4.546.107 | 1,396,98? |
| Virginia | 8 | $12 \%$ | 178, 550 | 16,546 | 243, 640 | 175,600 | 2,691,200 | 1,850,926 |
| West Virgini | 10 | 0 | 18,850 | 2, 300 | 33, 650 | 31,000 | 105, 000 | 169, 750 |
| North Carolina | 3 | 348 | 120, $93 \cdot$ | 31,451 | 226,200 | 103, \%00 | 1,42\%, 000 | 884.988 |
| South Caz | 0 | 189 | 80, 550 | 9, 000 | 12n, 109 | 54.900 | 819, 000 | 6:8,000 |
| Georgia | , | 8 ? | 80, 400 | 9,200 | 89,050 | 67. 920 | 1, 419, 600 | 809, 087 |
| South Cential Division: |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 1 | 144 | 89, 269 | $22,83,4$ | 83, 700 | 111,700 | 1.59\%,850 | 1,662.0f0 |
| Tennessee | 14 | 312 | 183, 353 | 44,318 | 279, 150 | 376, 280 | 3. 613, 568 | 2,603, 825 |
| Alabama | 5 | 21 | 115, 250 | 4,050 | 123, 400 | 117,000 | 1,107, 500 | 350,000 |
| Mississipp | 2 | 10 | 28,000 | 5,060 | 39,500 | 80,300 | 535, 000 | 901.250 |
| Louisiana | 0 | $3 \%$ | 81,000 | 12,000 | 98, 500 | 171,650 | 1, 89\%,300 | 1,919,313 |
| Texas | 10 | 9 | 85,065 | 23,840 | 100, 640 | 158, 050 | 1, 694,000 | 719,716 |
| Arkansas | 0 | 23 | 32, 500 | 15,599 | 33,250 | 72, 01\% | 530,500 | 165,000 |
| Oklahoma |  |  | 6,000 | 2,500 | 6, 800 | 7,000 | (6), Of: 0 |  |
| Indian Territor | - | 8 | 2, 600 | 500 | 850 | 1,350 | 65,000 | 1,000 |
| North Central Division: |  |  |  |  |  |  |  |  |
| Ohio | 24 | 345 | 4\%8, 237 | 67, 230 | 657, 100 | 709,550 | 8,565, 361 | 9, 413,30\% |
| Indian | , | 12 | 218,163 | (6, 860 | 295.000 | 3\%3,000 | 3, 667, 060 | 2,155, 405 |
| Illinois | R | 669 | 586,893 | \%0,644 | $5 \% 4.621$ | 1,070, 2\%1 | 9,211,065 | 11,478, ОC8 |
| Nithigan | 8 | 07 | 219, 137 | 47, 120 | 397.452 | 987,819 | 2,008, 630 | 1,872, 897 |
| Wisconsin | 14 | 69 | 149, 052 | 33, 335 | 212, 704 | 4\%1,925 | 2,29\%, 445 | $1,514,794$ |
| Minne | 3 | 25. | 115.900 | 14,300 | 143, 66\% | 215, 436 | 2,739, 700 | 1,65\%,57\% |
| Iowa | 12 | 81 | 178, 20 | 35.05 C | 288, 350 | 200, 810 | 2,5\%4, 2\%5 | 1,504, 181 |
| Missouri | 12 | 104 | $200.31 \%$ | 48, 425 | 382, 850 | 409,175 | 5, 269,500 | 3,5゙8,81!) |
| North Dakota | 0 | 0 | 10, 131 | 3,604 | 24, 430 | 12,282 | 22\%.000 | - 40.009 |
| Soutir Dakota | 3 | 11 | 22, 753 | 4, 1000 | 33, 250 | 39, 900 | 389,000 | 100,002 |
| Nebraska | $\because 5$ | 19 | 79, 784 | 17. 420 | 160,200 | 281,504 | $1.815,000$ | 336,257 |
| Western Division:--.--- ${ }^{\text {Kans }}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana | 0 | 0 | 7, 335) | 2, 6381 | 7,500 | 41,009 | 1\%0,000 |  |
| Wyoming | , | 0 | 9,300 | 5, 500 | 11,000 | 77,500 | 125, 000 | -7,000 |
| Colorado. | 2 | 48 | 68,800 | 30,450 | 86,000 | 134,092 | 1,505,300 | 620,009 |
| New Mex |  |  | 4,000 |  | 4,000 | 3,500 | \%5, 000 | 0 |
| Arizona |  |  | 5.000 |  | \%,000 | 44,747 | 102.650 | ! |
| Utah |  | 100 | 25, 100 | - 11,6\%0 | 33, 652 | 29,586 | 569, 468 | 25\%\%000 |
| Nerad |  |  | 7,64 | 6,231 | 12,500 | 68,542 | 170,975 |  |
| Idaho |  |  | 4,200 | 1,700 | 4,500 | 45, 000 | 200,000 |  |
| Wasling | 0 | 25 | 44,588 | 16, 700 | 74,900 | 50, 000 | 1,283, 000 | 188,500 |
| Oregon | 0 | 28 | 30, 086 | 6,953 | 52,200 | 35, 850 | 536, 500 | 444,909 |
| California | - | 98 | 192,738 | 57,289 | 240,233 | 862, 000 | 5,222,854 | 21,175,954 |

Table 14．－Income of miversities and colleges for men and for both sexes．

| State or Territory． | Tuition and other fees． | From produc－ tive <br> funds． | State or municipal appropri． ations． | From <br> United States Govern－ ment． | From other sources． | Total income． | Benefac－ tions． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | \＄8，3\％5， 703 | \＄6，110，653 | 83，401， 031 | 3985， 009 | \＄1，964，002 | R20， $836,4 \varepsilon 8$ | \＄10，840， 084 |
| North Atlantic Division | 4，028，9\％6 | $3,1 \% 6,628$ | 424， 435 | 183．500 | 717， 898 | 8，531，437 | 5，407， 806 |
| South Atlantic Division． | 690， 408 | 428.8317 | 300， 700 | 24\％，26\％ | 197．046 | 1，864， 288 | 4：33， 597 |
| South Central Division．－ | 696， 603 | 459， 778 | 246，595 | 136，664 | 278，563 | 1，818， 133 | 566，898 |
| North Central Division． | 2，692， 161 | 1，567， 920 | 1，890， 330 | 217，578 | 780，728 | 7， 0183,707 | 3，868，551 |
| Western Division．．．．．．－ | 267，645 | 477， 460 | 534，051 | 200，000 | 49，767 | ］，528， 923 | 563，302 |
| North Atlantic Division： <br> Maine | 78， 337 | 78, |  | 40，600 | 14， 808 | 231，62． | 56，537 |
| New Hampsh | 44，350 | 60,000 | 10，000 |  | 11， 0 | 114， 350 | $350,000$ |
| Vermont．．．．． | 17， 754 | 45，246 | 15，600 | 25，060 | \％，79\％ | 111，32\％ | 143，320 |
| Massachusett | 326， $79 \%$ | 794， 971 | 0 |  | 188，240 | 1，910，008 | 1，117，040 |
| Thode Islan | 97，266 | 78，393 | 0 | 0 | 1，265 | 176，924 | 151，815 |
| Comnecticut | 534， 456 | 348，648 | 0 | 0 | 29，469 | 911，5\％ | 782，182 |
| New York | 1，237， 896 | 1，224， 420 | 201，571 | 38，500 | 327，26\％ | 3，029， 619 | 1，754， 895 |
| New Jersey | 186，111 | 133， 828 |  | 40， 0100 |  | －359， 939 | 235，753 |
| Pennsylvamia．．－．．－． | 906，009 | 412， 643 | 17\％， $28 \frac{4}{6}$ | 40， 000 | 150，1：\％ | 1，686，043 | 810，264 |
| South Atlantic Division： |  |  |  |  |  |  |  |
| Delaware | 1，592 | 4，980 | \％ 0 | 40，000 | 3，056 | 49，628 |  |
| Maryland－．－．－－－．－ | 181，645 | 80，259 | 5\％， 200 | 40， 000 | 28，922 | 386，026 | 1，000 |
| District of Colambia． | 171，321 | 73， 401 | 0 | 103， 100 | 73，655 | 421，4\％ | \％ 20.802 |
| Virginia | 131，97\％ | 97，248 | 63，750 | － 0 | 18，242 | $311.21 \%$ | \％ 7,531 |
| West Virginia | 11，235 | 8，918 | 108，300 | 35，000 | 8，496 | 171，949 | 50， 000 |
| North Carolina | 98，947 | 53， 037 | 25，000 | 0 | 22，254 | 209， 238 | 88， 473 |
| South Carolin | 3， 2221 | 23，332 | 29，500 | 0 | 11，957 | 107，010 | 4．8， 100 |
| Georgia | 38，811 | 50，6\％5 | 8，950 | 16，607 | 10， 464 | 135， 567 | 78，963 |
| Florida | 29，659 | 27，017 | 10，000 | 12，500 | 0 | \％2， 176 | 17＇， 208 |
| South Central Division： |  |  |  |  |  |  |  |
| Kentucizy | 88， 838 | 85， 183 | 30，780 | 36，375 | 3\％，003 | 278，679 | 130， 524 |
| Alabama | 2\％， | $13 \sim$ ， | 12， | 40,00 | 136， 818 | 500，：204 | 281， 100 |
| Mississi | 18 | 41. | 31,000 | 0 | ， | 100 | 1，000 |
| Louisian | 77， 500 | 123，134 | 15， 740 | 2\％， $10 \%$ | 8， 433 | 251， 914 | 17，S00 |
| Texas | 1\％8，72\％ | 37， 895 | 78，000 | 0 | 64,135 | 358， 75 | 96，650 |
| Arkansas | 44，973 | 12，200 | 33，230 | 33，182 | 4，190 | 127．7\％5 | 19，548 |
| Oklahoma | 1，200 | 0 | 19，000 | 0 | 0 | ＊0， 200 |  |
| Indian Territory | 5，944 | 0 | 0 | 0 | 5， 200 | 11， 114 | 8，990 |
| North Central Division： |  |  |  |  |  |  |  |
| Onio－－ | 30.20800 | 418.959 | 296，851 | 2\％， 000 | 124， 028 | 1， $23 \%, 638$ | 6 㐌． 994 |
| Indiana | 13゙1，39\％ | 115，066 | 87.395 | 0 | 25， 883 | 38．， 74.8 | 61.475 |
| Illinois | 901， 673 | 480， 745 | 20\％，450 | 40，000 | 142，279 | 1，832， 147 | 1，92\％，583 |
| Michigan | 249， 902 | 96，448 | 293， 583 | 0 | 52， 757 | 692， 690 | 284， 087 |
| Wicconsin | 175，289 | 69，918 | 244， 200 | 40,000 | 21，117 | 480，524 | 52， 193 |
| Minnesota | 169， 234 | 76， 875 | 135，6\％8 | 40，000 | 42，363 | 434， 100 | 49，214 |
| Iowa | 241，950 | 94，676 | \％5， 000 |  | 15\％， 830 | 569， 456 | 258， 019 |
| Missour | 280， 940 | 163，049 | 74， 479 | 3：2，578 | 34， 605 | 585,741 | 311，052 |
| North Da | 4，940 | 3，200 | 45，734 | 0 | 0 | 53，874 | 24,000 |
| South Dako | 23，009 | 4，000 | 33.800 | 0 | 5，329 | 65， 338 | 95， 779 |
| Nebraska | 68，531 | 19，286 | 192，000 | 40，000 | 21，779 | 341，540 | 47，013 |
| Kensas． | 149，481 | 25，748 | 120， 000 | 0 | 9＇2， 656 | 387，885 | 11\％，111 |
| Western Division： |  |  |  |  |  |  |  |
| Montana | 9，642 | 10，000 | 21，590 | 0 | 9 | 41，232 |  |
| Wyoming | 451 |  | 14， 815 | 40，000 | 467 | 55，7\％3 | 0 |
| Colorado | 40，1：7 | 36，922 | \％2，000 | 0 | 11．000 | 100， 049 | 233，020 |
| New Mexic | 435 | 0 | 11，000 | 0 | 0 | 11， 435 | 13,500 |
| Arizon |  | 0 | 10，000 | 40，000 | 2，995 | 52，295 |  |
| Utah | 14，255 | 6，3\％4 | 61，318 |  | 14，507 | 36，754 | 4.181 |
| Neva |  |  | 17，000 | 40，000 | 110 | 57， 110 |  |
| Idaho | 200 |  | 10，000 | 40，000 | 0 | 50，200 | 100 |
| Washingt | 55， 180 | 12， 510 | 50， 000 | 0 | 2，300 | 119， 920 | 20\％， 690 |
| Oregon | 25，975 | 22， 219 | 30， 000 |  | 4，684 | 82， 878 | －8，208 |
| California． | 121，070 | 389，435 | 236，298 | 40，000 | 14， 404 | 801， 20 亿 | 56， 600 |

Table 15.-Professors and students in colleges for women, Division A.


Table 16.-Degrees conferred by colleges for women, Division A.

| State. | A. B. | B. S. | B. L. | Mus. B. | A. M. | Ph. D. | $\begin{aligned} & \text { Honor. } \\ & \text { ary } \begin{array}{l} \text { ary } \end{array} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | 692 | 7 | 1.20 | 4 | 55 | 2 | 1 |
| North Atlantic Division | 618 | 7 | 117 | 4 | 51 | 2 | 1 |
| South Atlantic Division | 62 |  |  |  | 4 |  |  |
| North Central Division | 8 |  |  |  |  |  |  |
| Western Division.. | 4 |  | 3 |  |  |  |  |
| North Atlantic Division: |  |  |  |  |  |  |  |
| Massachusetts.-.---- <br> New York | 176 | $\ddot{\square}$ | 11. | 4 | \%1 |  | 1 |
| Pennsylvania. | 57 |  |  |  | 8 | 1 |  |
| South Atlantic Division: |  |  |  |  |  |  |  |
| Maryland | 58 |  |  |  |  |  |  |
| Virginia --.........- | 4 |  |  |  | 4 |  |  |
| North Central Division: Illinois | 8 |  |  |  |  |  |  |
| Western Division: |  |  |  |  |  |  |  |
| California.... | 4 |  | 3 |  |  |  |  |

Table 17.-Property of colleges for women, Division A.

| State. |  |  | Libraries. |  |  | Value of scientific apparatus. | Value of grounds and buildings. | Productive funds. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Volumes. | Pamphlets. | Value. |  |  |  |
| United States | 18 | 447 | 197,419 | 15, 800 | \$375,098 | \$646, 540 | \$6, 878, 532 | \$4, 636, 630 |
| North Atlantic Division | 16 | 375 | 174,392 | 13,300 | 335, 098 | 554, 540 | 5, 678,532 | 4, 052, 377 |
| South Atlantic Division | 2 | 51 | 10,700 | 2,000 | 13,000 | 65, 000 | 815,000 | 439,000 |
| North Central Division | 0 | 5 | 6,327 |  | 7,000 | 25, 000 | 135, 00f | 70,253 |
| Western Division. | 0 | 16 | 6,000 | 500 | 20,000 | 2,000 | 250,006 | 75, 060 |
| North Atlantic Division: Massachusetts | 0 | 244 | 92, 500 | 3, 490 | 199, 800 | 366, 441 | 2,997, 857 | 1,764,698 |
| New York | 2 | 77 | 49,67: | 1,900 | 75, 298 | 140, 101 | 1,961, 365 | 1,287,679 |
| Pennsylvania | 14 | 54 | 32, 220 | 8,000 | 60,000 | 47,998 | 718,810 | 1,000,000 |
| South Atlantic Division: <br> Maryland | 2 | 34 | 7,700 | 1,700 | 10,000 | 45, 000 | 680, 000 | 337,000 |
| Virginia | 0 | 17 | 3,000 | 300 | 3,000 | 20,000 | 135, 000 | 102,000 |
| North Central Division: <br> Illinois | 0 | 5 | 6,30\% |  | 7,000 | 25, 000 | 135,000 | 70,253 |
| Western Division: Califoruia ..... | 0 | 16 | 6,000 | 500 | 20,000 | 2,000 | 250,000 | 75,000 |

Table 18.-Income of colleges for women, Division $A$.

| State. | Tuition and other fees. | From productive funds. | From other sources. | Total income. | Benefactions. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| United States | \$836, 388 | \$252, 817 | S252, 178 | \$1,341,383 | \$324, 352 |
| North Atlantic Division | 705,350 | 224, 183 | 2:9, 109 | 1,158,642 | 251, 802 |
| South Atlantic Division | 56,457 | 22,280 | 21,900 | 100, 637 | 63,400 |
| North Central Division | 20,281 | 3,249 | 1,169 | 24,699 | 9,150 |
| Western Division | 54,300 | 3,105 | 0 | 57, 405 |  |
| North Atlantic Division: |  |  |  |  |  |
| Massachusetts.. | 520, 532 | 101, 681 | 2,000 | 624, 233 | 170,180 |
| New York | 139, 068 | 60, 502 | $2 \because 6,839$ | 426, 409 | 59, 322 |
| Pennsylvania ......... | 45, 730 | 60,000 | 270 | 108, 000 | 22,300 |
| South Atlantic Division: Maryland | 32,580 | 17,000 | 16,000 | 6.5,580 | 59,000 |
| Virginia | 23, 877 | 5,280 | 5,900 | 35, 057 | 4,400 |
| North Central Division: <br> Illinois | 20,281 | 3,249 | 1,169 | 21,699 | 9,150 |
| Western Division: California....- | 54,300 . | 3,105 | 0 | 5\%, 405 |  |

Table 19.-Professors and students in colleges for women, Division $B$.


Table 20.-Degrees conjerred by colleges for women, Division B.


Table 21.-Property of colleges for women, Division $B$.

| State. | Libraries. |  | Value of scientific apparatus. | Value of grounds and buildings | Productive funds. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volumes. | Value. |  |  |  |
| United States | 259,605 | \$285, 705 | \$159, \%20 | 88, 768, 971 | \$810,050 |
| North Atlantic Division | 41,178 | 52, 800 | 43, 633 | 1,237,047 | 228,200 |
| South Atlantic Division | 81,750 | 94, 465 | 33, 702 | $\cdot 3,192,500$ | 164,000 |
| South Central Division | 76,249 | 71,240 | 17,935 | 1, 994, 000 | 51, 100 |
| North Central Division | 53, 328 | 57,200 | 29,450 | 2, 0855,424 | 306, 750 |
| Western Division | 6,500 | 10,000 | 15, 000 | 258,000 | 0 |
| North Atlantic Division: |  |  |  |  |  |
| Massachusetts. | 11,000 | 11,500 3.000 | 3.500 2,000 | 195, 000 | 180, 000 |
| New York. | 7,878 | 13, 500 | 13,033 | 229, 047 | 48,209 |
| New Jersey | 3,000 | 4.000 | 200 | 25,000 | 0 |
| Pemisylvania | 17,000 | 20, 860 | 24,900 | 655, 000 | 0 |
| South Atlantic Division: | 14,300 | 18,300 | 4,350 | ¢85, 000 | 30, 000 |
| Virginia | 8,100 | 7,975 | 6,900 | 483,000 |  |
| West Virginia | 1,750 | 2,150 | 400 | 36,500 | 0 |
| North Carolina | 21, 800 | 27,580 | 4,940 | 63s,000 | 10,000 |
| South Carolina | 9,900 | 11,500 | 6,660 | 50h, 000 | 11,000 |
| Georgia | 26,000 | 24,960 | 10, 432 | 850,000 | 113, 000 |
| Kentucky-............. | 15, 400 | 11,800 | 5,500 | 375, 000 | 100 |
| Tennessee | 80, 449 | 21.400 | 4,469 | 485, 0 ¢0 | 31.600 |
| Alabama. | \%,500 | 7,275 | 1,675 | 272,600 | 0 |
| Mississippi | 16. 400 | 13,525 | 2,435 | 49ヶ,000 |  |
| Louisiana. | 2, 290 | 2,500 | 2,450 | 83, 000 | 20, 000 |
| Arkas ..... | 12. 250 | 14,240 | 1,400 | 235, 000 | ${ }_{0}^{0}$ |
| North Central Division: | 1,500 | 500 | 75 | 30,000 | 0 |
| Ohio | 23, 800 | 28,000 | 15,000 | 589, 424 | 94,000 |
| Illinois | 5,200 | 3,500 | 4,750 | 250,000 | 4,000 |
| Wisconsin | $4,2 \cdots 8$ | 2,500 | 2,000 | 150,000 | 155,000 |
| Minnesota | 2,000 | 1,200 | 400 | 35,000 | 6,000 |
| Missouri | 16,700 | 20,000 | 6,300 | 711,000 | 97, 750 |
| Kansas.-...... | 2,000 | 2,009 | 1,000 | 350, 000 | 10,000 |
| California.. | 6,500 | 10,000 | 15,000 | 258,000 | 0 |

Pable 22.-Income of colleges for women, Division $B$.

| State. | Tuition and other fees. |  | State or municipal ap-propriations. | From other sources. | Total income. | Benefactions. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States. | \$1,503, 097 | \$41,448 | \$34,318 | \$428,633 | \$2, 007, 496 | \$264,214 |
| North Atlantic Division | 238,120 | 11,192 | 2,318 | 83.40¢ | 335, 030 | 30,258 |
| South Atlantic Division | 482,387 | 8, 4200 | 1,400 | 120,5\%4 | 612,781 | 135,005 |
| South Central Division | 424,591 | 3,906 | 30,600 | 135, 713 | 534, 810 | 20,300 |
| North Central Division | 3:27,999 | 17,939 |  | 85,946 | 431,875 | 78,654 |
| Westera Division.-. | 30, 000 | 0 | 0 | 3,000 | 33,600 | 0 |
| North Atlantic Division: |  |  |  |  |  |  |
| Maine | 9, 750 | 9,106 | 1,000 | 0 | 19,856 | 12, 755 |
| Massachusetts | 15, 000 |  |  | 60,000 | 75, 000 | 1,600 |
| New York | 68,2\%0 | 2,056 | 1,318 | 800 | 72, 444 | 2,500 |
| New Jersey | 12,000 |  |  | 2.) 0 | 12,000 |  |
| Pennsylvania | 133, 100 | 0 | 0 | 220,600 | 155,700 | 14,000 |
| South Atlantic Division: <br> Maryland | 59,600 | 1,000 | 0 | 13,090 | 7\%, 600 | 5,200 |
| Virginia. | 85, 155 |  | 0 | 22, 976 | 108,131 |  |
| West Virginia | 9,100 | 0 | 0 | 9,700 | 18,800 | 800 |
| North Carolina | 91,565 | 500 | 0 | 25, 400 | 117.465 |  |
| South Carolina | 86,300 | 670 | 0 | 27,055 | 114,025 | 104,005 |
| Georgia ---- | 150, 667 | 6, 250 | 1,400 | 22,443 | 180, 760 | 25, 600 |
| South Central Division: Kentucky | \%9, 280 | 6 | 0 | 11,300 | 90,856 | 1,800 |
| Tennessoe. | 123, 750 | 1,900 | 0 | 31, 400 | 157,050 | 12,100 |
| Alabama | 47,360 | 0 | 0 | 14,600 | 61,960 | 2, 000 |
| Mississippi | 101,182 | 0 | 30,600 | 33,473 | 165,265 | 109 |
| Louisiana | 15, 510 | 2,000 | 0 |  | 18, 500 | 8200 |
| Arkansas | 51,289 | 0 | 0 | 4,000 | 92, 0,000 | 4,000 |
| North Central Division: |  |  |  |  |  |  |
| Ohio- | 83,006 | 4,55\% | 0 | 7,471 | 95, 034 | 22,100 |
| Illinois | 74,809 | 200 | 0 | 12,000 | 8\%,000 | 3,000 |
| Wisconsin | 38, 354 | 6,485 | 0 | 1,403 | 46,242 |  |
| Minnesota | 7,000 |  | 0 | 2, 60 | 9, 4 tio | 26,979 |
| Missouri- | 104,839 | 5.988 | 0 | -63,072 | 173,899 | 25,075 |
| Kansas.-......- | 20, 000 |  | 0 | 0 | 20,700 | 500 |
| California | 30, 009 | 0 | 0 | 3,000 | 33,000 | 0 |

TABLE 23．－Professors and students in schools of technology．

| State or Territory． | Number of institutions. | Piofessors and instructors． |  |  |  |  |  | Students． |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Prepar－ atory depart－ ments． |  | Collegi－ ate depart－ ments． |  | Total namber （exclud． ing dupli－ cates）． |  | Prepara－ tory． |  | Collegiate． |  | Graduate． |  |  |  |
|  |  |  |  | Resi－ dent． | Non－ resi－ dent． |  |  |  |  |  |
|  |  | $\begin{gathered} \text { 㤩 } \\ \text { y } \end{gathered}$ | $\begin{aligned} & \text { घं } \\ & \text { an } \\ & \text { an } \end{aligned}$ |  |  | $\stackrel{\tilde{y}}{\underset{\sim}{0}}$ | $\begin{aligned} & \text { घं } \\ & \text { d } \\ & \text { ह } \end{aligned}$ | $\underset{\text { dic }}{\substack{0 \\ \hline}}$ | $\begin{aligned} & \text { घं } \\ & \text { む } \\ & \text { 号 } \end{aligned}$ |  | $\begin{aligned} & \text { A } \\ & \text { © } \\ & \text { B } \\ & B \end{aligned}$ | $\underset{\sim}{\underset{y y y}{*}}$ | \％ | 边 | $\begin{aligned} & \text { घं } \\ & \text { है } \\ & \text { B } \end{aligned}$ | 㽣 | ¢ี ® ¢ |
| UnitedStates | 43 | 111 | 28 | 1，104 | 92 |  |  | 1，183 | 114. | 2， 415 | 645 | 10，161 | 1，385 | 188 | 25 | 25 | 4 |
| Noreh Atlantic Division | 11 | 10 | 2 | 346 | 12 | 354 |  | 47 | 14 | 2，748 | 253 | 17 | 3 | 0 | 3 |
| South Atlantic Diyision． | 8 | 16 | 2 | 208 | 1 | $29 \%$ | $\stackrel{\rightharpoonup}{3}$ | 364 | 63 | 1，588 | 6 | $5 \frac{4}{4}$ | 0 | 0 | 0 |
| South Central Division．． | 5 | 20 | 1 | 96 | 2 | 115 | 3 | 585 | 34. | 1，121 | 104 | 22 | 3 | 2 | 0 |
| North Central Division．． | 11 | 38 | 11. | 823 | 55 | 348 | 63 | 727 | 203 | 3，563 | 697 | $7 \%$ | 31 | 23 | 1 |
| Western Division ．．．．．．．－ | 9 | 27 | 1.2 | 131 | 22 | $1 \pm 6$ | 32 | 692 | 332 | $8 \% 1$ | 325 | $\% 1$ | 18 | 0 | 0 |
| North Atlantic Division： New Hamphive | 1 | 5 | 0 | 20 | 0 | 23 |  | 1.$)$ | 0 | 116 | 9 | 3 | 0 | 0 | 0 |
| Massachusetts ．－．．．－．－－ | 3 | 0 | 0 | 18.5 | 2 | 185 | $\stackrel{9}{2}$ | 1． 0 | 0 | 1，549 | 54 | 14 | 1 | 0 | 0 |
| Rhode Island． | 1 | 4 | 2 | 13 | 7 | 17 | 9 | 20 | 11 | 58 | 21 | 0 | 2 | 0 | 3 |
| Comnecticut | 1 | 1 | 0 | 16 | 2 | $1 \%$ | 2 | 12 | 3 | 48 | $2 \%$ | 0 | 0 | 0 | 0 |
| New York | 3 | 0 | C | 80 | 1 | 80 | 1 | 0 | 0 | $5 \%$ | 132 | 0 | 0 | 0 | 0 |
| New Jersey | 2 | 0 | 0 | $3 *$ | 0 | 32 | 0 | 0 | 0 | 41 \％ | 10 | 0 | 0 | 0 | 0 |
| South Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maryland | 1 | 0 | 0 | 63 | 0 | 63 | 0 | 0 | 0 | 281 | 0 | 0 | 0 | 0 | 0 |
| Virginia | 2 | 0 | 0 | 51 | 0 | 51 | 0 | 0 | 0 | 561 | 0 | 22 | 0 | 0 | 0 |
| North Carolina | 2 | 5 | 2 | 36 | 1 | 39 | $\stackrel{\sim}{2}$ | 78 | 63 | 321. | 6 | 14 | 0 | 0 | 0 |
| South Carolina | 2 | 5 | 0 | $3 \frac{1}{2}$ | 6 | 39 | 0 | 136 | 0 | 435 | 0 | 18 | 0 | 0 | 0 |
| Geozrgia ．－．．．．－．－．－．－． | 1 | 6 | 0 | 24 | 0 | 30 | 0 | 15.0 | 0 | 300 | 0 | 0 | 0 | 0 | 0 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  | 9 |  | 0 |  |
| Alabama－－－－－－－－－－．－ | 1 | 3 | 0 | 21 | 0 | 29 | 0 | － 48 | 0 1 | 3， | ${ }_{1}^{8}$ | $\frac{9}{5}$ | 0 | 1 | 0 |
| Mississipp | 2 | 16 0 | 0 0 0 | 31 | 0 0 | 47 | 0 0 | 4.2 0 | 1 | 263 | 13 0 | $\frac{5}{6}$ | 0 | 1 | 0 |
| Oklahoma | 1 | 1 | 1 | 14 | 2 | 15 | 3 | 10.5 | 33 | 141 | 83 | 2 | 1 | 1 | 0 |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio． | 1 | 0 | 0 | 23 | 0 | 23 | 0 | 0 | 0 | 228 | 0 | 9 | 0 | 0 | 0 |
| Indiana | 2 | 0 | 0 | 8.5 | 7 | 85 | $\%$ | 0 | 0 | 846 | 73 | 19 | 13 | 20 | 0 |
| Thinois | 1 | $1 \%$ | 5 | 30 | 3 | $4 \%$ | 8 | 25.3 | 25 | 360 | 0 | 0 | 0 | 0 | 0 |
| Michigan | 2 | 0 | 0 | 37 | 5 | $5 \%$ | 5 | 0 | 0 | 534 | 109 | 5 | 0 | 0 | 0 |
| Kown－－ | 1 |  |  | 45 | 17 | 45 | 17 | 150 | 26 | 606 | 119 | 19 | 5 | 0 | 0 |
| Noreh Dakota | 1 | 10 | 3 | 22 | 2 | 22 | $\because$ | 61 | 52 | 159 | 26 | 1 | 0 | 0 | 0 |
| Soutla Dakota | 2 | 9 | 3 | 25 | 5 | 31 | 7 | 141 | 51 | 254 | 81 | 7 | 2 | 0 | 0 |
| Kansas． | 1 | 2 | 1 | 36 | 16 | 38 | 17 | 123 | 39 | 616 | 209 | 12 | 11 | 3 | 1 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana | 1 | 0 | 2 | 13 | $\pm$ | 13 | 6 | 26 | 39 | $3 \%$ | 16 | 0 | 0 | 0 | 0 |
| Colorado | 2 |  |  | 40 | 3 | 40 | 3 | 74 | 34 | 384 | 85 | 10 | 1 | 0 | 0 |
| New Mioxico | 2 | 3 | 4 | 19 | 3 | 22 | 8 | 117 | 63 | 33 | 20 | 0 | 1 | 0 | 0 |
| Utain | 1 | 10 | 2 | 14 | 2 | 24 | 4 | 272 | 117 | 62 | 35 | 0 | 2 | 0 | 0 |
| Washington | 1 | 10 | 2 | 24 | 4 | 25 | 5 | 170 | 70 | 108 | 32 | 3 | 3 | 0 | 0 |
| Orezon－－－－－－－－－－－－－－－ | 1 | 4 | 2 | 21 | 6 | 22 | 6 | 33 | 9 | 207 | 137 | 8 | 11 | 0 | 0 |

TABLE 24.-Students pursuing various courses of study in schools of technology.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Stato or Territory. \&  \&  \&  \& $$
\begin{gathered}
\text { Meehanical engi- } \\
\text { noering. }
\end{gathered}
$$ \&  \&  \&  \&  \& $$
\begin{aligned}
& \mathrm{Pe} \\
& \mathrm{go} \\
& \hline \\
& \text { di } \\
& \text { di }
\end{aligned}
$$ \& da,y.
$$
\begin{aligned}
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& \text { d } \\
& \text { g } \\
& \text { B }
\end{aligned}
$$ \& Bu
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| s. |
| ब. は 0 8 | \&  <br>

\hline United States \& 61 \& \%16 \& 1,786 \& 2,246 \& 840 \& 1,146 \& 517 \& $1: 8$ \& 0 \& 1.2 \& 132 \& 64 \& 6,210 <br>
\hline North Atlantic Division \& 50 \& 241 \& 266 \& 49.7 \& 307 \& 156 \& 61. \& 53 \& \& \& 1 \& 9 \& 910 <br>
\hline South Atlantic Division \& \& 30 \& $17 \frac{1}{4}$ \& 454 \& 185 \& 302 \& \& 51 \& \& \& \& \& 1,695 <br>
\hline South Central Division - \& \& 138 \& 721 \& 313 \& 95 \& 63 \& \& \& \& \& \& \& 1,100 <br>
\hline North Central Division \& \& 324 \& 519 \& 769 \& 258 \& 585 \& 195 \& 24 \& \& \& 66 \& 11 \& 1,61\% <br>
\hline Western Division .-.... \& 11 \& 43 \& 106 \& 190 \& 5 \& $3 \pm$ \& 261 \& \& 0 \& 12 \& 65 \& 41 \& 893 <br>
\hline North Atlantic Jivision: Nery Hampshire \& 22 \& \& \& \& \& \& \& \& \& \& \& \& <br>

\hline | New Hampshire --.. |
| :--- |
| Massachusetts. | \& 2 \& 3 \& 165 \& 238 \& $13 \%$ \& 141 \& 60 \& 53 \& \& \& \& \& 803 <br>

\hline Rhode Island \& \& 41 \& 25 \& 20 \& \& 7 \& \& \& \& \& 1 \& 9 \& 78 <br>
\hline Connecticut \& 18 \& \& 36 \& \& \& \& \& \& \& \& \& \& 48 <br>
\hline New Yorlk. \& \& 3
189 \& \& \& 178 \& \& 1 \& \& \& \& \& \& 334 <br>
\hline New Jersey --........ \& 10 \& 189 \& \& 2 2 \& \& 6 \& \& \& \& \& \& \& <br>
\hline Sonth Atlantic Division: Maryland. \& \& \& \& \& \& \& \& \& \& \& \& \& $2{ }^{2} 1$ <br>
\hline Virginia \& \& 30 \& 68 \& 123 \& 33 \& 89 \& \& \& \& \& \& \& 553 <br>
\hline North Carolina \& \& \& 51 \& 114 \& 86 \& 73 \& \& 51 \& \& \& \& \& 29 <br>
\hline South Carolina \& \& \& 55 \& 118 \& 6 \& 40 \& \& \& \& \& \& \& 589 <br>
\hline Georgia -- \& \& \& \& 100 \& \& 100 \& \& \& \& \& \& \& <br>
\hline South Central Division: \& \& \& \& \& \& \& \& \& \& \& \& \& <br>

\hline | Alabama. |
| :--- |
| Mississippi | \& \& \& 128 \& 57 \& 12 \& 61

2 \& \& \& \& \& \& \& 314 <br>
\hline Texas .-. - \& \& \& 190 \& 218 \& 8 \& 2 \& \& \& \& \& \& \& 350 <br>
\hline Oklahoma \& \& 138 \& 36 \& 44 \& \& 6 \& \& \& \& \& \& \& <br>

\hline | North Central Division: |
| :--- |
| Ohio | \& \& 2 \& \& 41 \& 21 \& 13 \& 29 \& : \& \& \& \& \& <br>

\hline Indiana \& \& 153 \& 128 \& 283 \& 135 \& 235 \& \& 5 \& \& \& \& \& <br>
\hline Illinois. \& \& \& \& 100 \& 25 \& 165 \& \& 10 \& \& \& \& \& <br>
\hline Michigan \& \& \& 198 \& 245 \& \& \& 121 \& \& \& \& \& \& 210 <br>
\hline Iowa - \& \& \& $15 \frac{1}{1}$ \& 81 \&  \& 161 \& 21 \& \& \& \& \& \& $5 \pm 4$ <br>
\hline North Dakota \& \& 21 \& 3 \& 7 \& \& \& \& \& \& \& \& \& 101 <br>
\hline South Dakota \& \& 145 \& 36 \& 56 \& \& 5 \& 21 \& 7 \& \& \& 66 \& 14 \& 164 <br>
\hline Kansas -......- \& \& \& \& \& \& \& \& \& \& \& \& \& 563 <br>
\hline Western Division: Montana \& \& 21 \& \& \& \& 5 \& \& \& 0 \& 12 \& 12 \& 18 \& <br>
\hline Colorado \& \& \& 16 \& 66 \& 34 \& 5 \& 201 \& \& 0 \& 1, \& 19 \& \& 214 <br>
\hline New Mexico \& 11 \& 22 \& 1 \& 7 \& 3 \& \& 6 \& \& \& \& 11 \& 8 \& <br>
\hline Utah. \& \& \& 9 \& 4 \& 8 \& \& \& \& \& \& \& \& 214 <br>
\hline Washington \& \& \& 18 \& 5 \& 8 \& 23 \& 34 \& \& \& \& 55 \& 20 \& 193 <br>
\hline Oregon. \& \& \& 48 \& 99 \& \& 6 \& \& \& \& \& \& \& $2{ }_{2} 0$ <br>
\hline
\end{tabular}

TABEE 2.J.-Degrees conferred on men by scluools of technology.


TABLE 26.-Degrees conferred on women by schools of technology.

| State or Territory. | A. B. | Ph. B. | B. S. | B. Agr . | M.S. | B. L. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | 1 | 12 | 94 | 5 | 3 | 3 |
| North Atlantic Division |  |  | 12 | 5 |  |  |
| South Central Division.- |  |  | 7 |  | 1 |  |
| North Central Division |  | 12 | 49 |  | 2 |  |
| Western Division . | 1 |  |  |  |  | 3 |
| North A tlantic Division: |  |  |  |  |  |  |
| New Hampshire ... |  |  | 4 |  |  |  |
| Massachusetts |  |  | 4 | ------- |  |  |
| Rhode island. |  |  | 4 |  |  |  |
| South Central Division: |  |  |  | 5 |  |  |
| Alabama --.-........ |  |  |  |  | 1 |  |
| Mississippi |  |  | 2 |  |  |  |
| Oklahoma --.-.-.... |  |  |  |  |  |  |
| North Central Division: |  |  |  |  | 1 |  |
| Michigan..--- |  |  | 4 |  |  |  |
| Iowa---- |  | 12 | 5 |  |  |  |
| South Dakota |  |  | 9 |  |  |  |
| Kansas |  |  | 20 |  | 1 |  |
| Western Division: |  |  |  |  |  |  |
| Montana. |  |  | $\stackrel{2}{2}$ |  |  |  |
| Colorado |  |  | 10 |  |  |  |
| Washingt | 1 |  |  |  |  | 3 |
| Oregon |  |  | 12 |  |  |  |

TABLE 27.-Property of schools of technology.

| State or Territory. |  |  | Libraries. |  |  | Value of scientific apparatus. | Value of grounds and buildings. | Productive funds. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Volumes. | Pamphlets. | Value. |  |  |  |
| United States. | 9 | $4 \%$ | 431, 11 \% | 125, 483 | \$752, 22.5 | \$3, 40\%,19\% | \$10,987, 628 | \$13,361, 028 |
| North Atlantic Division. |  | 197 | 162, $6: 8$ | 41,123 | 202, 826 | 1,146, | 4, 400, 672 | 5,303, 346 |
| South Atlantic Division. | 5 | 205 | 69,989 | 9,100 | 135, 510 | 1, 374,258 | $1,536,165$ | 5,585, 212 |
| South Central Division.- | 0 | 1 | 37.247 | 19,368 | 48, 327 | 288,226 | 887, 258 | 659, 6.50 |
| North Central Division. | 0 | 67 | 122,934 | 40, 375 | 247, 470 | 1. 260,242 | 3, 174, 68 t | 6,445,626 |
| Western Division...... | 0 | 0 | 38,219 | 15,516 | 58,102 | 312.196 | 988,849 | 367, 194 |
| North Atiantic Division: New Hampshire... | 0 | 105 | 6,800 | 4,453 | 8,000 | 55,500 | 84,016 | 41,800 |
| Massachusetts .- | 3 | 65 | 77, 724 | 17,6\%\% | 139,000 | 415, 327 | 1,461,81\% | 4, 159, 781 |
| Fhode Island. |  |  | 10,000 | 3, 000 | 14, 000 | 93.239 | -182, 650 | 50,060 |
| Comectictut | 0 | 0 | 7,409 | 3,000 | 20,000 | 13,250 | 90,000 | 185,000 |
| New York. | 1 | 3 | 50,278 | 12,998 | 62, 226 | 501,049 | 2,257, 189 | 441,765 |
| New Jersey-......... | 0 | 24 | 10,46\% |  | 19,600 | 67, 000 | 325, 000 | 475,000 |
| South Atlantic Division: Maryland |  |  | 41,000 |  | 85, 000 | 21,43\% | 377, 550 | 0 |
| Virgnia | 5 | 201 | 14,140 | 6,600 | 32, 000 | 100, 600 |  | 354,312 |
| North Carolina | 0 | 1 | 4,149 | 1,000 | 4,500 | 39,225 | 166,085 | 135,000 |
| South Caroli |  |  | 9,200 | 1,560 | 12,000 | 109,000 | 351.280 | 95,900 |
| Goorgia .-. |  |  | 1,500 |  | 2,000 | 107),000 | 200,000 | 0 |
| South Central Division: Alabama |  |  | 13,95\% | 800 | 15. 000 |  |  |  |
| Mississipp | 0 | 1 | 12, 93 | 10,568 | 15,596 | 104, 20 | 244,405 | 197,150 |
| Texas ... |  |  | 5, iito | 4,000 | 5, 509 | 43,521 | 437, 553 | 209,600 |
| Oklanoma | 0 | 0 | 5.697 | 4.000 | 12,231 | 65, 000 | 60, 000 | , |
| North Central Division: Ohio | 0 | 9 | 2,000 |  |  | 75, 000 | 500, 000 | 2,000,000 |
| Indiana. |  |  | 19,250 | 4,7\% | 35, 800 | 388.000 | 5\%\%, 009 | 2,940,000 |
| Illizois | 0 | 4 | 18,600 |  | 18,000 | \%5, 000 | 500,000 | 1,500,0¢0 |
| Michigan | 0 | 3 | 35,288 | 6,354 | 73, 270 | 323,258 | 508, 241 | 818,944 |
| Iowa... |  |  | 12, 460 | 2,000 | 50,000 | 236,58t | 518, 143 | 68:2, $83 \pm$ |
| Nor th Dakot | 0 | 0 | 8, 000 | 10250 | 15,090 | 18,000 | 132, 8 \% | 0 |
| South D | 0 | 51 | 6,300 | 10,000 | 7,300 | 16,009 | 147,500 | 0 |
| Kansas -....... | 0 | 0 | 21, 450 | 17,000 | 43;100 | 128,400 | 310, 100 | 503,848 |
| Western Division: Montana -..... | 0 | 0 | 4, \%0 | 4,000 | 10,000 | 10,000 | 125, 000 |  |
| Colorado |  |  | 14, 420 | 1, 650 | 21, 198 | 157, 3:7 | 2\%2, 849 | 226,500 |
| New Mexico | 0 | 0 | 4,049 | 2,200 | 8,000 | 48,500 | 100,000 |  |
| Utah |  |  | 6,481 | 6, 161 | 8,100 | 42,869 | 167, 000 | 0 |
| Washington |  |  | 5,519 | 1,505 | 6, 700 | 65, 000 | 215,000 |  |
| Oregon |  |  | 3, 000 |  | 4,000 | 18, 500 | 109,003 | 1416,694 |

TARLE 2S.-Income of sehools of technology.

| State or Territory. | Tuition and other fees. | $\begin{aligned} & \text { From } \\ & \text { produc- } \\ & \text { tive } \\ & \text { funds. } \end{aligned}$ | State or municipai appropriations. | United States Government ap-propriations. | From other sources. | Total income. | Bene-factions. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UnitedStates. | Stis5, 849 | \$640, 561 | \$1,029,056 | \$1, 999, 168 | \$248, 462 | \$ $1,3 \% 3,096$ | \$5゙66,813 |
| North Atlentic Division. | 307, 684 | 204,233 | 111,500 | 798, 274 | 35, 55\% | 1,887, 243 | 556, 813 |
| South Atlantic Division_ | 50, 140 | 35, 113 | 169, 750 | 650,8\% | $3 \stackrel{3}{\sim}, 641$ | 938, 514 | 10, 000 |
| South Central Division - | 2,269 | 55, 420 | 148, 349 | 140,024 | 34,319 | 3\%5, 431 |  |
| Nowth Central Jivision. | 89,09\% | 302, 509 | 434, 9\%\% | 240,000 | 118,854 | 1,205, 437 |  |
| Western Division ......- | 6,659 | 23,236 | 169, 480 | 240,0c0 | 27,096 | 466, 471 |  |
| North AtlanticDivision: New Hampshire. | 1,120 | 4,800 | 10, 500 | 40, 000 | 50, 390 | 76, 813 |  |
| Massachusetts .-..--- | 295,118 | 147,270 | 56, 0 ¢0 | 40,000 | -5,809 | 484, 197 | 4875 |
| Rhode Island. |  | 2,500 | 15, 000 | 40,000 | 0 | 57,500 |  |
| Comnecticut |  | 6,750 | 15,000 | $3{ }^{2}, 500$ | 0 | 54, 230 | 60 |
| New York | 38, $30 \%$ | $21.501)$ | 0 | 575, 764 | 141 | 635,741 |  |
| New Jersey | 33,117 | 21, 113 | 15,000 | 0 | 9,212 | 78, 740 | 68.745 |
| South Atlantic Division: <br> Maryland | 0 | 0 | 0 | 551, 703 | 0 | 551,703 |  |
| Virginia | 19,969 | 21, 859 | 40,000 | 31, 667 | 11,605 | 125, 100 |  |
| Noveth Carolina | 7,525 | 7,500 | 17,500 | 40, 100 | 10,397 | 82, 920 |  |
| South Carolina | 12,646 | 5, 754 | \%9, 250 | 27, 200 | 10,639 | 136,289 |  |
| Georgia --..----...- | 10,000 | 0 | 32,500 | 0 | 0 | 42, 500 | 10, 00 |
| South Central Division: <br> Alabama |  | 20,980 | 11, 780 | 28, 875 | 4,680 |  |  |
| Mississipp | 1,300 | 12,730 | 83, 369 | 40,050 | 26, $7 \%$ | 164,171 |  |
| Texas ... | - 0 | 14,280 | 27, 900 | 33, 750 | 0 | 75,930 |  |
| Oklahoma | 969 | 8,180 | 50, 300 | 37, 409 | 2, 85\% | 69,805 |  |
| North Central Division: <br> Ohio | 18,0f0 | 45,000 | 0 | 0 | 0 | 63,000 |  |
| Indiana | 29, 203 | 49, 000 | \% \% , 888 | 40,000 | 4, 796 | 195, $88 \%$ |  |
| Illinois | 30, 0000 | 100,000 | 0 | 0 | 0 | 130, 000 |  |
| Michigan | 10,791 | 60,000 | 103, 750 | 40,000 | 82, \%86 | 337, $3 \% 7$ |  |
| Iowa- |  | 41,019 | 25,244 | 40,000 | 62, $87 \%$ | 169, 135 |  |
| North Dakota | 443 | 0 | 19 | 40,000 | 5, 754 | 46, 197 |  |
| South Dakota | 660 | 330 | 51, 400 | 40,000 | 12, 646 | 105, 036 |  |
| Kansas | 0 | 27, 160 | 91,700 | 40.000 | 0 | 158,860 |  |
| Western Division: <br> Montana |  | 0 | 14,000 | 40,000 | 5,596 | 59, 596 |  |
| Colorado | 2,600 | 10,913 | 66, 507 | 40, 000 | 3,149 | 123,169 |  |
| New Mexico | 1,885 | 0 | 15, 170 | 40,000 | 2,135 | 59, 130 |  |
| Utah | 0 | 0 | 18,300 | 40, U60 | 8,633 | 66,933 |  |
| Washington | 2,734 | 0 | 23,210 | 10,000 | 5,007 | \% 01,451 |  |
| Oregon...-. | 0 | 12,393 | 32, 293 | 40, 000 | 2,5\%6 | 87, 19\% |  |

Table 29.-Statistics of universities and

colleges for men and for both sexes．

| Professorsand instruct－ ors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de－ partments． |  | Total num－ ber（exclud－ ing dupli－ cates）． |  | Prepara－ tory de－ partment． |  | Collegiate department． |  | Graduate department． |  |  |  | Professional depart－ ments． |  |  |
|  |  | Resident． | Nonresident． |  |  |  |  |  |  |
| 要 | $\begin{aligned} & \text { gi } \\ & \text { d } \\ & \text { d } \\ & \hline \end{aligned}$ |  |  | 豆 | $\begin{aligned} & \text { á } \\ & \text { d } \\ & 0 \end{aligned}$ | 㤩 | $\begin{aligned} & \text { dं } \\ & \text { घ } \\ & \text { ह } \end{aligned}$ | 豆 | $\begin{aligned} & \dot{\tilde{0}} \\ & \text { a } \\ & 0 \end{aligned}$ | 要 | $\begin{aligned} & \text { घं } \\ & \text { हुँ } \\ & \text { B } \end{aligned}$ | 淢 | $\begin{aligned} & \text { a } \\ & \text { d } \\ & \text { a } \\ & \text { B } \end{aligned}$ | 吾 |  |  |
| （1） | 10 | 111 | 18 |  |  | 113 | 且是 | 15 | 16 | 198 | 18 | 19 | 29 | 11 | 2 2 |  |
| 0 | 0 | 10 | 0 | 25 | 0 | 115 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |
| 0 | 0 | 12 | 0 | 20 | 6 | 124 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 0 | 0 | 3 | 4 | 40 | 60 | 60 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 0 | 0 | 2 | 7 | 70 | 80 | 40 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 0 | 0 | 3 | 3 | 72 | 56 | 93 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 4 | 0 | 15 | ${ }_{7}^{0}$ | 17 | ${ }^{0}$ | 76 | ${ }_{1}^{0}$ | ${ }_{0}^{6}$ | 0 | 0 0 | 0 0 | ${ }_{5}^{0}$ | 0 0 | ${ }_{7}^{6}$ |
| 1 | 0 | 5 | 7 | 64 | 53 | 5 | 1 | 0 | 0 | 0 | 0 | 57 | 0 | 7 |
| 0 | 0 | 26 | 0 | 15 | 0 | 130 | 0 |  | 0 | 0 | 0 | 0 | 0 | 8 |
| 21 | 0 | 43 | 0 | 0 | 0 | 179 | 22 | 10 | 1 | 0 | 0 | 199 | 0 | 9 |
| 0 | 0 | 15 | 7 | 71 | 33 | 31 | 22 | 3 | 1 | 0 | 0 | 0 | 0 | 10 |
|  | 0 | 5 | 6 | 15 | 28 | 50 | 125 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 0 | 0 | 8 | 2 | 100 | 100 | 100 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | $1 \%$ |
| 0 | 0 | 6 | 1 | 18 | 29 | 37 | 22 | n | 0 | 0 | 0 | 0 | 0 | 13 |
| 0 | 0 | 5 | 4 | 50 | 40 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| $\bigcirc$ | 0 | 12 | $1{ }^{0}$ | 69 260 | 3 104 | 477 | 6 87 | 0 0 | 0 0 | 0 1 | 0 0 | 0 137 | 0 0 | 15 |
| 26 | 0 | 51 | 12820 | 260 3 3 | 104 23 | 204 13 | 87 8 | 0 | 0 0 | 1 0 | 0 0 | 137 19 | 0 | 16 17 |
| 0 | 0 | 1 | ${ }_{2}^{2}$ | 37 | 38 | 10 3 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 82 | 0 | 186 | 1 | 0 | 0 | 964 | 819 | 118 | 99 | 3 | 1 | 405 | 34 | 19 |
| 0 | 0 | 11 | 5 | 64 | 44 | 58 | 47 | 0 0 | 3 0 | 0 0 | 0 0 | 0 0 | 0 0 | 20 |
|  | 0 0 | 13 |  | 27 |  | 35 10 | 21 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 21 22 |
| 0 | 0 | 15 | 0 | 75 | ${ }_{0}$ | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 57 | 2 | 71 | 13 | 103 | 60 | 50 | 21 | 0 | 0 | 0 | 0 | 104 | 10 | 24 |
| 0 | 0 | 4 | 2 | 23 | 23 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| 0 | 0 | 13 | 10 | 126 | 53 | 12 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | ${ }_{27}^{26}$ |
| 0 | 0 | 23 | 0 | 114 | 0 | 191 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 0 | 0 | 18 | 0 | 22 | 0 | 198 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 0 | 0 | 1：4 | 4 10 | 23 | 12 0 | 10 744 | 9 473 | － | ${ }_{56}^{0}$ | 0 0 | 0 0 | 0 | 0 | 29 30 |
| 47 | 2 | 94 | 9 | 154 | 201 | 181 | 135 | 17 | 5 | 0 | 0 | 98 |  |  |
| ${ }_{0}^{0}$ | 0 | $3{ }^{32}$ | 4 | 92 133 | 60 | 204 | 191 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 3\％ |
| $7 \%$ | ${ }_{3}^{0}$ | 18 97 | 10 | $\begin{array}{r}138 \\ 48 \\ \hline\end{array}$ | $\stackrel{0}{27}$ | 30 61 | 0 80 | 0 | 0 | 10 10 | 1 | ＋${ }^{0}$ | 9 | 338 |
| 0 | 0 0 | ${ }_{3}^{23}$ | 0 0 | 0 0 | 0 0 | 131 <br> 265 | 5 | 11 | 0 | $\stackrel{2}{0}$ | 0 | 0 0 | 0 0 | 35 36 |
| 97 | 0 | 258 | 0 | 0 | 0 | 1， 719 | ${ }_{0}$ | 194 | 43 | 46 | 0 | 430 | 0 | 37 |
| 0 0 | 0 0 | ¢ | 0 | 16 0 | 15 0 | ${ }_{22}^{12}$ | 8 0 | 0 4 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 38 39 |
| 16 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | วิ | 0 | 0 | 0 | 129 | 0 | 40 |
| 95 | 0 | 118 | 0 | 0 | 0 | 236 | 107 | 86 | 13 | 0 | 0 | 651 | 0 | 41 |
|  |  |  | 6 | 20 | 6 | 44 | 30 | 4 | 2 | 0 | 0 | 0 | 0 |  |

Table 29．－Statistics of universities and

|  | Location． | Namo． | Year of first open－ ing． | Religious or nonsecta－ rian con－ trol． | Professors and instructors． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Prepar． atory depart－ ment． |  | Collegi－ ate de－ part－ ment． |  |
|  |  |  |  |  | 荿 | 令 | 宅 | ¢ ¢ \％ 1 |
|  | 1 | ${ }^{1}$ | 8 | 4 | 5 | 6 | 7 | 8 |
|  | DISTRICT OF CO－ LUMBIA－cont＇d． |  |  |  |  |  |  |  |
| 43 | Washington | Georgetown Unirersity | 1791 | R C | 11 | 0 | 28 | 0 |
| 44 | －－－－do ．．．．．． | Gonzaga College ．－ | 18\％1 | F．C | 8 | 0 | 7 | 0 |
| 45 | －－．do | Howard University | 185\％ | Nation | 3 | 1 | 8 | 1 |
| 46 |  | St．John＇s College．．．．．．．－．．．－．－．－．．－． | 1866 | R．C． | 6 | 0 | 6 | 0 |
|  | FLORIDA． |  |  |  |  |  |  |  |
| ${ }_{4}^{4}{ }_{6}^{\prime}$ | De Isand | John B．Stetson University ．－．．． | 1887 | Bapt ．．．．．．． | $1 \sim$ | 13 | 9 | 4 |
| $48$ | Lake City | Florida State Agricultural College | 1884 | State－．－．－．－ | 1 | 1 | 12 | 4 |
| 49 | St．Leo－－ | St．Leo Military College－－．．．．．．．．．． | 1890 | R．C．．．．－．．． | 2 | 0 | 4 | 0 |
| 50 | Tallahassee．．．－．．．． | Seminary West of the Suwanee River． | 18．3\％ | State | 5 | 1 | 5 | 1 |
| 51 | Winter Park | Follins College | 1885 | Nonsect | 0 | 1 | 6 | 3 |
| 52 | Athens． | University of Georgia | 1801 | State | 0 | 0 | 21 | 0 |
| 53 | Atlanta | Atlanta Baptist College | 1897 | Bapt ．－． | 4 | 4 | 3 | 3 |
| 54 | －do | Atlanta University | 1869 | Nonsect | 4 | 6 | 4 | 4 |
| 55 |  | Morris Brown College | 1885 | A．M．E．－－－ | 4 | 4 | 5 | 1 |
| 56 | Bowdon | Bowdon College－－．－．．．．－．．．．．．－．．．．．． | $185 \%$ | Nonsect | 1 | 3 | $\because$ | 1 |
| $5 \%$ | Dahlonega | North Georgia Agricultural Col－ lege． | 1873 | State |  |  | 7 | $\because$ |
| 58 | Macon | Mercer University ．．．．．．．．．．－．－．．．．．．－． | $183{ }_{i}^{*}$ | Bapt | 1 | 0 | 10 | 0 |
| 59 | Oxford | Emory College－ | $183 \%$ | M．E．So | 3 | 0 | 10 | 0 |
| 60 | South Atlanta ．－．．． | Clark University－－．．．．．．－． | $18 \% 0$ | M．E．－．．．．．． | 2 | 3 | 4 | 3 |
| 61 | Wrightsville ．．．．．． | Nannie Lou Warthen I | 1888 | M．E．－． | 0 | 2 | 1 | 3 |
| 6.2 | Young Harris | Young Harris College． | 1885 | Mi．E．So | 1 | 1 | 4 | 3 |
| 63 | Moscow | University of Idaho | 18923 | State． | 3 | $\stackrel{2}{2}$ | $1: 3$ | 4 |
| 64 | Abing ${ }^{\text {don }}$ | Hedding College ．－．．．－．－．－－－．．．．．．－． | 18.33 | M．E． | 4 | 5 | 5 | 3 |
| 65 | Bloomington ．－．．．． | Illinois Wesleyan University－－．．．． | 1850 | M．E | 1 | 2 | 9 | 0 |
| 66 | Bourbonnais | St．Viateur＇s College－．．．．．－－－－－－． | 1868 | R．C－－－． | 4 | 0 | 16 | ${ }^{0}$ |
| 67 | Carlinville－－－．．．．． | Blackburn University | $185!$ | Presb ．．．．．． | 4 | 3 | 6 | 2 |
| 68 | Carthage－－－．－－－．－ | Carthage College ．－－－－－．．－．－－．－．．－． | $18 \%$ | Luth | 4 | $\stackrel{2}{2}$ | 7 | 0 |
| 69 | Champaign（or Ur－ bal1a）． | University of Illinois－－．．．．－．．．．．－－ | 1558 | State | 4 | 3 | 193 | 15 |
| 70 | Chicago－．．．－－．－．．． | St．Ignatius College | 1869 | R．C | 24 | 0 | 14 | 0 |
| 71 | indo． | University of Chicago | 1892 | Bapt ．－．．．．－ | 8 | 1 | 179 | 8 |
| 7 | Efingham |  | 1881 | Nousect．．． | 2 | 1 | 8 | 3 |
| 73 | Eimhurst | Evangelical Proseminary ．．－－－－．．． | 1881 | Ger Evang－ | 2 | ${ }_{0}$ | 6 | 0 |
| 74 | Eureka |  | 185.5 | Christian．． | 5 | 2 | 8 | 0 |
| 75 | Evanston | Northwestern University ．．．．－．．－． | 18.5 | M．E．．．．．．．． | 13 | 6 | 50 | 2 |
| 76 | Ewing－ | Ewing College ．－．．．．．．．．．．． | 1867 | Bapt－－．．．．． | 6 | ${ }_{6}$ | \％ | 0 |
| 77 | Fulton－－．．．．．．．－．－． | Northern Illinois College | 1865 | Nonsect．．．－ | $\stackrel{2}{9}$ | $\underset{\sim}{2}$ | ${ }^{3}$ | 1 |
| 78 79 | Galesburg－－－．－．－．－． | Knox College．．．． | 1837 $185 \%$ | Nonsect－．．． | 9 6 | 1 | 11 | 5 |
| 80 | Greenville．．．－－－－．．－－－ | Greenville College | 1892 | Free Meth． | 6 | 1 | 1 | 1 |
| 81 | Jacksonville．．．．－． | Illinois College ．．．． | 1899 | Nonsect．．． | 15 | 0 | 15 | 0 |
| 82 | Lake Forest ．．－．－． | Lake Forest University | 1876 | Presb | 18 | 11 | 18 | 13 |
| 83 | Lebanon－－－－－－－－－－ | McKendree College | $18 \% 8$ | M．E | 8 | 0 | 7 | 0 |
| 84 | Lincoln | Lincoln University | 1866 | Cumb．Pres | 2 | 1 | 4 | 1 |
| 85 | Monmouth | Monmouth College． | 1856 | Un．Presb．－ | 5 | 3 | 10 | 8 |
| 86 | Napervilie． | Northwestern College | 1861 | Ev．Ass＇n．． | 9 | 1 | 7 | 1 |
| 87 | Per＇u． | St．Bedo College－－．．－ | 1891 | R．C | 3 | 0 | 10 | 0 |
| 88 | Quincy－．－．－．－．－．－． | Chaddock College $a_{\text {．}}$ | 1857 | M．E | 1 | 1 | $\stackrel{2}{2}$ | 2 |
| 89 | －．．．do．－．．．－．．．．．．．． | St．Francis Solanus College－－．．．．．．． | 1860 | R．C | 4 | 0 | 7 | 0 |
| 90 | Rock Island ．．．．．．．．－ | Augustana Coilege．．．．．．．．．．．．．．．．．－． | 1860 | Luth | 11 | 0 | 12 | 0 |
| 91 | Teutopolis．．． | St．Joseph＇s College | 1868 | R．C | 0 | 0 | 10 | 0 |
| 92 | Upper Alton． | Shurtleff College． | 18：\％ 7 | Bapt | 4 | 2 | 6 | 1 |

$a$ Changed to Bovs＊Industrial School in June， 190.
colleges for men and for both sexes－Continued．

| Prodessors and instruct－ ors． |  |  |  |  |  |  |  | Students． |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de－ partments． |  | Total num－ ber（exclud－ ing dupli－ cates）． |  | Prepara－ tory de－ partment． |  | Collegiate department． |  | Graduate department． |  |  |  | Professional depart－ ments． |  |  |
|  |  | Resident． | Nonresident． |  |  |  |  |  |  |
| 苍 | $\begin{aligned} & \text { g̈ं } \\ & \text { ह } \end{aligned}$ |  |  | 号 | $\begin{aligned} & \text { घ̈ } \\ & \text { है } \end{aligned}$ | $\underset{\gtrless}{\stackrel{\rightharpoonup}{巴}}$ | $\begin{aligned} & \text { g } \\ & 8 \end{aligned}$ | di | $\begin{aligned} & \text { a } \\ & \text { है } \end{aligned}$ | $\begin{aligned} & \text { gi } \\ & \text { 品 } \end{aligned}$ | \＆ | 稛 | $\begin{aligned} & \text { g } \\ & \text { B } \end{aligned}$ | Ȧ | g 0 8 |  |
| 9 | 13） | 111 | 12 |  |  | 13 | 14 | 15 | 16 | 18 | 18 | 19 | 31 | 21 | 3\％ |  |
| 6.5 | 0 | 125 | 0 | 179 | 0 | 121 | 0 | 19 | 0 | 6 | 0 | 357 | 0 | 43 |
| 0 | 0 | 12 | 0 | 134 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |
| 47 | 1 | 61 | 9 | 125 | 20 | 36 | $\gamma$ | 0 | 0 | 0 | 0 | 307 | 19 | 45 |
| 0 | 0 | 12 | 0 | 108 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| 0 | 0 | 18 | 17 | 82 | $12 \%$ | 18 | 31 | 0 | 0 | 0 | 0 | 8 | 0 | $4 \%$ |
| 0 | 0 | 13 | 5 | 4＇） | 11 | 60 | 21 | 2 | 2 | 0 | 0 | 0 | 0 | 48 |
| 3 | 0 | 6 | 0 | 8 | 0 | $3 \frac{1}{4}$ | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 49 |
| 0 | 0 | 5 | 1 | 40 | 63 | 15 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |
| 0 | 0 | 9 | 8 | 37 | 23 | 13 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 51 |
| 5 | 0 | 26 | 0 | 0 | 0 | 280 | 0 | 5 | 0 | 0 | 0 | 52 | 0 | 52 |
| 3 | 0 | 6 | 8 | 24 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 53 |
| 0 | 0 | 5 | $\%$ | 69 | 05 | 21 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | $5 \frac{1}{4}$ |
| 5 | 0 | 10 | 8 | 16 | 4 | 12 | 1 | 0 | 0 | 0 | 0 | 23 | 0 | 59 |
| 0 | 0 | $\stackrel{7}{2}$ | 3 | 80 | 70 | 55 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 56 |
| 0 | 0 | 7 | 2 | 44 | 12 | 113 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 57 |
| 4 | 0 | 15 | 0 | 32 | 0 | 205 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 58 |
| 1 | 0 | 14 | 0 | 44 | 0 | 245 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 59 |
| 0 | 0 | 4 | 3 | 44 | 11 | 12 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| 0 | 0 | 1 | 5 | 71 | 78 | 43 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| 0 | 0 | 5 | 4 | 60 | 63 | 125 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 62 |
| 0 | 0 | 15 | 6 | 83 | 37 | 59 | $4{ }^{\prime \prime}$ | 0 | 8 | 0 | 0 | 0 | 0 | （i3） |
| 0 | 0 | \％ | 8 | 61 | 50 | 25 | 25 | 0 | 0 | 7 | 1 | 0 | 0 | 64 |
| 11 | 0 | 25 | 12 | 99 | 60 | 80 | 45 | 0 | 0 | 0 | 0 | 68 | 1 | 65 |
| 4 | 0 | 24 | 0 | 40 | 0 | 130 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 66 |
| 0 | 0 | 7 | 3 | 29 | 3.8 | 12 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 67 |
| 0 | 0 | 9 | 2 | 30 | 18 | 31 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 68 |
| 97 | 3 | 203 | 21 | 103 | 64 | 615 | 283 | 33 | 8 | 32 | 4 | $7 \%$ | － 49 | 69 |
| 0 | 0 | 31 | 0 | 339 | 0 | 101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 15 | 0 | 202 | 9 | 113 | $5 \%$ | 723 | 1，0\％8 | 647 | 313 | 0 | 0 | 355 | 28 | $\% 1$ |
| 0 | 0 | 8 | 3 | 125 | 100 | 75 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 72 |
| 0 | 0 | 8 | 0 | 4. | 0 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \％ |
| 2 | 0 | 12 | 4 | 39 | 60 | 18 | 37 | 0 | 0 | 3 | 0 | 22 | 0 | 74 |
| 204 | 21 | 263 | 33 | 308 | 199 | 290 | 282 | $\because 6$ | 11 | 3 | \％ | 1，4\％9 | 128 | 75 |
| 0 | 0 | 8 | 7 | 58 | 24 | 13 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 76 |
| 0 | 0 | 5 | 3 | 63 | 62 | 15 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 77 |
| 0 | 0 | 21 | 15 | 104 | 43 | 168 | $13 \%$ | 2 | 4 | 0 | 0 | 0 | 0 | \％8 |
| 6 | 2 | 11 | 2 | 23 | 11 | 40 | 26 | 0 | 0 | 0 | 0 | 7 | 0 | 79 |
| 2 | 0 | 8 | 7 | 16 | 9 | 5 | 9 | 0 | 0 | 0 | 0 | \％ | 1 | 80 |
| 0 | 0 | 15 | 0 | 79 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 |
| 79 | 1. | 105 | 18 | 129 | 142 | 72 | 71 | 1 | 2 | 1 | 0 | 925 | 0 | $8 \%$ |
| 2 | 0 | 13 | 2 | 77 | 25 | 29 | 13 | 0 | 0 | 2 | 0 | 5 | 0 | 83 |
| 0 | 0 | 6 | 4 | 29 | 24 | 29 | 17 | 0 | 0 | 1 | 0 | 0 | 0 | 84 |
| 0 | 0 | 10 | 8 | 62 | 46 | 8\％ | 65 | 0 | 1 | 0 | 0 | 0 | 0 | 85 |
| 3 | 0 | 14 | 5 | $9 \%$ | 26 | 79 | 24 | 0 | 0 | 0 | 0 | 39 | 0 | 86 |
| 0 | 0 | 13 | 0 | 15 | 0 | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 87 |
| 0 | 0 | 3 | 3 | 15 | $1 \%$ | 17 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 88 |
| 0 | 0 | 14 | 0 | 10 | 0 | 104 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 89 |
| 4 | 0 | 25 | 6 | 54 | 18 | $10 \%$ | 8 | 0 | 0 | 15 | 2 | 63 | 0 | 90 |
| 0 | 0 | 10 | 0 | 0 | 0 | 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 91 |
| 0 | 0 | 10 | 3 | 59 | 51 | 23 | 25 | 3 | 1 | 5 | 0 | 0 | 0 | 92 |

Table 29.-Statistics of universities and

|  | Location. | Name. | $\left\lvert\, \begin{gathered} \text { Year } \\ \text { of } \\ \text { first } \\ \text { open- } \\ \text { ing. } \end{gathered}\right.$ | Religious or nonsectarian control. | Professors and instructors. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Preparatory department. |  | Collegi ate de-partment. |  |
|  |  |  |  |  |  | $\begin{aligned} & \text { घं } \\ & \text { g } \\ & \text { 0 } \\ & B \end{aligned}$ | $\begin{aligned} & \text { 怱 } \end{aligned}$ |  |
|  | - $\quad 1$ | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|  | ILLINOIS-cont'd. |  |  |  |  |  |  |  |
| 93 | Westfield | Westfield College | 1865 | U. B | 5 | 1 | 5 | 1 |
| 94 | Wheaton | Wheaton College | 1860 | Cong | 9 | 6 | 9 | 6 |
|  | INDIANA. |  |  |  |  |  |  |  |
| 95 | Bloomington | Indiana University | 1824 | State.....-- | 0 | 0 | 65 | $\stackrel{2}{0}$ |
| 96 | Crawiordsville | Wabash College | 1883 | Nonsect --- | 3 | 0 | 12 | 0 |
| 97 | Fort Wayne. | Concordia College | 1839 | Luth .-....- | $\stackrel{7}{5}$ | 0 | 8 | 0 |
| 98 | Franklin. | Franklin College | 1834 | Bapet | 5 6 | 2 | 14 | $\underset{\sim}{2}$ |
| 109 | Hanover.- | Hanover College... | 183:) | Presb | 6 | 2 | 10 | $\tilde{1}$ |
| 101 | Irvington | Butler College. | 1855 | Cluristian | 8 | 3 | 15 | 2 |
| 102 | Merom. | Union Christian Colleg | 1859 | Chrrstian | 4 | 5 | 6 | 2 |
| 103 | Moores Hill | Moores Hill College | 1856 | M. E---. | 6 | 1 | 5 | 0 |
| 104 | Notre Dam | University of Notre Dame | 1842 | R. C | 24 | 0 | 34 | 0 |
| 105 | Richmond | Earlham College | 1847 | Friends | 0 | 1 | 13 | 1 |
| 105 | St. Meinrad | St. Meinrad College | 1857 | R. C | 0 | 0 | 11 | 0 |
| $10 \%$ | Upland. | 'Taylor Univer'sity. | $18 \pm 6$ | M. E | 8 | 4 | 6 | 3 |
|  | INDIAN TERRITORY. |  |  |  |  |  |  |  |
| 108 | Bacone. | Indian University | 1880 | Bapt | 0 | 1 | 3 | 5 |
| 109 | Muscogee | Henry Kendall College | 1894 | Presb .-.... | 4 | \% | 3 | 9 |
|  | 10WA. |  |  |  |  |  |  |  |
| 110 | Cedar Rapids. | Coe College | 1881 | Presb | 7 | 3 | 12 | 4 |
| 111 | Charles City | Charles City College | 1891 | Ger. M. E .- | 4 | 2 | 5 | 1 |
| 112 | Clinton --. | Wartburg College | 1868 | Luth . .-...- | 9 | 0 | 9 | 0 |
| 113 | College Springs | Amity College | 1855 | Nonsect | 6 | 5 | 6 | 5 |
| 114 | Decoralı --.-... | Luther College | 1861 | Luth | 13 | 0 | 13 | 0 |
| 115 | Des Moines | Des Moines College | 1865 | Bapt | 5 | 5 | 5 | 5 |
| 116 | --.-do .-.--- | Drake University. | 1881 | Christian .. | 23 | 8 | 22 | 3 |
| 117 | Dubuque | St. Joseph's College | 1873 | R. C | 6 | 0 | 6 | 0 |
| 118 | Fairfield | Parsons College | 1875 | Presb | 6 | 1 | 14 | 2 |
| 119 | Fayette | Upper Iowa University | 1857 | M. E | 15 | 11 | 15 | 11 |
| 120 | Grinnell | Iowa College...- | 1848 | Cong - . . . . - | 5 | 9 | 23 | 6 |
| 121 | Hopkinton | Lenox College | 18 \% 9 | Presb ...... | 2 | 2 | 4 | 4 |
| 122 | Indianola | Simpson College | 1867 | M. E.-.-. | 7 | 8 | 6 | 6 |
| 123 | Iowa City | State University of Iowa | 1855 | State......- | 0 | 0 | 43 | 4 |
| 124 | Lamoni . | Graceland College - | 1895 | L. D. S...... | 3 | 2 | 3 | 2 |
| 125 | Legrand --....... | Palmer College... | 1880 | Christian .. | $\stackrel{\rightharpoonup}{3}$ | 0 | 3 | 1 |
| 126 | Mount Pleasant | Germañ College ............... | 1873 | M. E.-.-.-- | 3 | $\stackrel{0}{8}$ | 8 | 1 |
| 127 | -..-do | Iowa Wesleyan University | 1814 | M. E | 5 | 2 | 8 | 2 |
| 128 | Mount Velnon | Cornell College.-- | 1857 | M. E. | $1:$ | 5 | 14 | 1 |
| 129 | Oskaloosa .... | Penn College .- | 1873 | Friends .-.- | 5 | 2 | 7 | 2 |
| 139 | Pella - .-. | Central University of Iowa | 1853 | Bapt ---... | 5 | 2 | 5 | 2 |
| 131 | Sioux City | Morningside College | 1890 | M. E......-- | 7 | 4 | 10 | 4 |
| 132 | Storm Lake | Buena Vista College | 1891 | Presb ------ | 5 | 3 | 5 | 3 |
| 133 | Tabor' | Tabor College ...-- | 1866 | Cong | 3 | 3 | 8 | 4 |
| 134 | Toledo | Western College | 1856 | U. B----- | 2 | 1 | 5 | 1 |
|  | KANSAS. |  |  |  |  |  |  |  |
| 135 | Atchison | Midland College | 1887 | Luth | 2 | 2 | 6 | 0 |
| 136 | ---do | St. Benedict's College | 1858 | R. C | 13 | 0 | 12 | 0 |
| 137 | Baldwin | Baker University | 1858 | M. E | 7 | 4 | 11 | 5 |
| 138 | Dodge City | Soule College .-. | 1894 | M.E | 4 | 3 | 2 | 1 |
| 139 | Emporia - | College of Emporia | 1883 | Presb .....- | 4 | 2 | 6 | 1 |
| 140 | Highland | Highland University | 1857 | Presb...... | 1 | 2 | 3 | $\stackrel{2}{2}$ |
| 141 | Holton - | Campbell University * | 1882 | Nonsect --- | 12 | 5 | 12 | 5 |
| $14 \%$ | Kansas City .-...... | Kansas City University | 1896 | Meth. Prot. | 2 | 2 | 10 | 1 |
| 143 | Lawrence.-........ | University of̂ Kansas.. | 1866 | State......- | 0 | 0 | 53 | 7 |
| 144 | Lecomptor | Lane University --.... | 1865 | U. B......... | 5 | 1 | 7 | 0 |
| 145 | Lincoln .....-....... | Kansas Christian College | $188 \%$ |  | 5 | 3 | 5 | 3 |
| 146 | Lindsborg --.-.-.-- | Bethany College ....- | 1881 | Luth | 10 | 2 | 10 | 2 |
| 147 | Ottawa -- | Ottawa University | 1865 | Bapt. | 9 | 2 | 8 | 1 |

[^107]colleges for men and for both sexes－Continued．

| 0000\＃E00000020 | 0000w000wi00式000000w0000：0 |  | 20100000000 | 00 | ＊ | Men． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 00000000000000 |  |  | 000：0i0000800 | 00 | ${ }^{\text {ma }}$ | Women． |  |  |
|  |  | 010 |  | 200． | m | Men． |  |  |
|  |  | Wo |  | $\infty$ | ${ }_{80}^{80}$ | Women． |  |  |
| ¢せdy |  | §中 |  | $3{ }^{3}$ | 8 | Men． |  |  |
|  |  | 9\％ | －0－10 | ${ }_{8}$ | 边 | Women． |  |  |
|  |  | $-\infty$ |  | $\stackrel{¢}{¢}$ | \％ | Men． |  |  |
|  |  | －-8 |  | $\dot{\infty}$ | $\stackrel{\text { m }}{\text { \％}}$ | Women． |  |  |
| 00008000000200 |  | ＝0 |  | 00 | $\approx$ | Men． |  |  |
| 10008000w0n00 | 0000nom000000） | co | －000000040003 | 00 | （20） | Women． |  |  |
| 200000000004100 | 00000V100000130040，00000000 | Do | 范000000010000 | 00 | $\begin{aligned} & 100 \\ & 0 \end{aligned}$ | Men． |  |  |
| 0000000000000 | 00000iv00000＊00ivor00000000 | 00 | 20000－0010000 | 00 | $\pm$ | Women． |  |  |
| 0000沟合00000＋0 |  | 00 | \％发のびロニ000000\％ | eo | $\stackrel{10}{08}$ | Men． |  |  |
| 0000ご000000000 | 00000000000in0000000000000 | 00 | ＋0000000000000 | 00 | \％ | Women． |  |  |
|  |  | 比\％ |  | 98 |  |  |  |  |

Table 23．－Siatistics of universities and

|  |  |  |  |  | 극훙훙 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { 导 } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | $0 \%$ |  | $\begin{aligned} & 5 \\ & \frac{5}{0} \\ & \frac{12}{5} \\ & 2 \\ & 2 \\ & ? \end{aligned}$ |  |  | $\begin{aligned} & \text { 花 } \\ & \text { en } \\ & \text { cu } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | 風 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | 20 |  |  |  |
|  |  |  | ぃぃいが | $\begin{aligned} & \text { What } \\ & \text { 篤劳解 } \end{aligned}$ |  |  |  |  |  |  | \％ |  |  |  |
|  |  <br>  |  |  |  |  |  |  |  |  |  | 10 |  |  |  |
| нーの日范。 |  |  | 0000 | ouou | －20coco |  | 000ヶった。 | －ocurvacuo |  |  | ct | Men． |  | － |
| 0200000 | ーマへ000いこの00 |  | 0000 | がくでく | 000 |  | いooび。 | －20000c＊ |  |  | （\％） | Women． |  |  |
|  |  |  |  | Coxocue | ゅーッジッ |  |  |  |  |  | Q | Men． |  | $\begin{aligned} & 0 \\ & \text { B } \\ & \text { O } \\ & 0 \end{aligned}$ |
| 000iveo | 0.20000000000. |  | 200100 | ち．00－ | 0000 |  | ーかOOH | Oーncrooivo |  | －O20020200 | （ 0 | Women． | + PQ P9. | 令 |

＊Statistics of 1898－99．
colleges for men and for both sexes－－Continned．

| Professors and instruct－ ors． |  |  |  | Sturlents． |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de－ partments． |  | Total num－ ber（exclud－ ing dupli－ caちes）． |  | Prepara－ tory de－ partment． |  | Collegiate department． |  | Graduate department． |  |  |  | Professional depart－ ments． |  |  |
|  |  | Res | ent． |  |  | Nonr | dent． |  |  |  |
| $$ |  |  |  | $\underset{\sim}{\text { aj }}$ | $\begin{aligned} & \text { सें } \\ & \text { घg } \\ & \text { है } \end{aligned}$ |  |  | $\begin{aligned} & \text { gi } \\ & \text { y } \\ & \text { Hy } \end{aligned}$ | $\begin{aligned} & \text { घं } \\ & \text { g } \\ & \text { ह } \end{aligned}$ | 害 | $\begin{aligned} & \text { घं } \\ & \text { g̈ } \\ & \text { B } \end{aligned}$ | $\begin{aligned} & \text { घं } \\ & \text { 恙 } \end{aligned}$ | $\begin{aligned} & \text { dं } \\ & \text { d } \\ & \text { g } \\ & \text { ह } \end{aligned}$ | $\underset{\text { Bi }}{\underset{y}{y}}$ | $\begin{aligned} & \text { did } \\ & \text { dü } \\ & \text { B } \end{aligned}$ | 号 | वี่ घี B |  |
| 9 | 直19 | 118 | 13 | 置： | 24 | 18 | E6 | 直年 | 188 | 19 | 30 | sis | 为辰 |  |
| 0 | 0 | 29 | 0 | 181 | 0 | 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 148 |
| 0 | 0 | 5 | 2 | 31 | 11 | 22 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 149 |
| 0 | 0 | 7 | 4 | 60 | 68 | 27 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 1.50 |
| 0 | 0 | 13 | \％ | 69 | 33 | 86 | 65 | 0 | 2 | 0 | 0 | 0 | 0 | 1.51 |
| 0 | 0 | 15 | 5 | 33 | 46 | 19 | 4． | 0 | 0 | 0 | 0 | 0 | 0 | $15 \%$ |
| 0 | 0 | 5 | 3 | $\stackrel{23}{3}$ | 21 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 153 |
| 0 | 0 | 13 | 4 | 135 | 91 | ？ | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 154 |
| 0 | 0 | 3 | 0 | $1 \%$ | 6 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 155 |
| 0 | 0 | 13 | 15 | 311 | 235 | 21 | 1.3 | 0 | 1 | 0 | 0 | 0 | 0 | 156 |
| （） | （） | 4 | 0 | 35 | 0 | 3. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 157 |
| 4 | 0 | $1 \%$ | 0 | 80 | 0 | 161 | 0 | 5 | 0 | 4 | 0 | 21 | 0 | 158 |
| 0 | 0 | 1.3 | 8 | 102 | 63 | 99 | 86 | 0 | 0 | 0 | 0 | 0 | 0 | 159 |
| 0 | 0 | 4 | T | 28 | 4. | 40 | 67 | 0 | 0 | 0 | 1 | 0 | 0 | 160 |
| $1)$ | 0 | 6 | 5 | 16 | 14 | 80 | 3.5 | 0 | 0 | 0 | 0 | 0 | $1)$ | 1 161 |
| 0 | 0 | 20 | 0 | 0.5 | \％ | 235 | 31 | 5 | 4 | 0 | 0 | 0 | 0 | 162 |
| 50 | 1 | 69 | 2 | 0 | 0 | 126 | 47 | 3 | 2 | 1 | 0 | 286 | 0 | 163 |
| $5 \%$ | 0 | $\%$ | 11 | 200 | $27 \%$ | 150 | $1 \%$ | 0 | 0 | 0 | 0 | 387 | 0 | 164 |
| 0 | 0 | 6 | 0 | 0 | 0 | 93 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 165 |
| 0 | 0 | 8 | 0 | 64 | 0 | 205 | ${ }^{0}$ | 0 | 0 | 0 | 0 | 0 | 0 | 166 |
| 0 | 0 | 11 | 4 | 97 | 194 | 101 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 167 |
|  | 0 | 21 | 0 | $13 \%$ | 0 | 231 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 168 |
| 0 | 0 | 14 | 0 | 40 | 0 | 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 169 |
| 0 | 0 | 9 | 0 | 86 | 6 | 59 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 170 |
| （） | （） | 18 | 0 | 88 | 0 | 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $1 \% 1$ |
| 0 | 0 | 3 | 3 | $4 \pi$ | 6.2 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | $1 \%$ |
| 7 | 0 | 11 | 2 | 17 | 3 | 8 | 5 | 0 | 0 | 0 | 0 | 38 | 2 | $1 \% 3$ |
| 3 | 0 | － | \％ | 101 | 218 | 3 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | $1 \% 4$ |
| 32 | （） | 59 | 16 | 0 | 89 | 180 | 176 | 7 | $1 \%$ | 0 | 0 | 4：8 | 3 | 175 |
| 18 | 0 | 36 | ${ }_{0}$ | 0 | 0 | 241 | 0 | 0 | 0 | 0 | 0 | 131 | 0 | 1\％6 |
| 5 | 0 | 19 | 2 | 0 | 0 | 17.5 | 118 | 0 | 0 | 0 | 0 | 28 | 2 | 177 |
| 9 | 0 | 51 | 0 | 0 | 0 | 299 | 16 | 8 | 0 | 0 | 0 | 41 | 1 | 178 |
| 0 | 0 | 18 | 2 | 0 | 0 | 124 | $\% 1$ | 0 | 0 | 0 | 0 | 0 | 0 | $1 \stackrel{1}{9}$ |
| 0 | 0 | 11 | 0 | 40 | 0 | 100 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 180 |
| 46 | 1 | 130 | 1 | $0^{\circ}$ | 0 | 176 | 0 | 185 | 0 | 0 | 0 | 242 | 42 | 181 |
| 0 | 0 | 15 | 0 | 140 | 0 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 183 |
| $?$ | 0 | 4 | 3 | 42 | 18 | 7 | 1 | 0 | 0 | 3 | 0 | 12 | 0 | 184 |
| 0 | 0 | 6 | 3 | 25 | 40 | 32 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 185 |
| 0 | 0 | 16 | 0 | 30 | 0 | 93 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 186 |
| 0 | 0 | 26 | 0 | 96 | 0 | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 187 |
| 0 | 0 | 18 | 0 | 80 | 0 | 173 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 188 |
| 7 | 0 | 35 | 0 | 97 | 0 | 83 | 0 | － 0 | $\theta$ | 0 | 0 | 26 | 0 | 183 |
| 0 | 0 | $\stackrel{2}{8}$ | $\underset{\sim}{2}$ | 10 | 6 | 16 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 189 |
| 0 | 0 | 13 | $\tau$ | 46 | 24 | 91 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 190 |
| 0 | 0 | $3 \sim$ | 0 | 0 | 0 | 364 | U | 4 | 0 | 0 | 0 | 0 | 0 | 191 |
| 0 | 0 | 35 | 0 | $2 \%$ | 0 | 290 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 192 |
| 98 | 0 | $11 \%$ | 5 | 0 | 0 |  | $31 \%$ | \％ 75 | 29 | 0 | 0 | $69 \%$ | 48 | 193 |
| 193 | 0 | 448 | 0 | 0 | 0 | 2，42t | 0 | 31.3 | 0 | 13 | 0 | 1，353 | 0 | 194 |
| 9 | 0 | 5 | 4 | 415 | 9 | 15 | 1 | 0 <br> 0 | 0 | 0 | 0 | 1， 0 | 0 | 195 |
| 97 | 5 | 103 | 5 | 4 | 0 | 179 | 96 | 3 | 5 | 1 | 0 | 367 | 68 | 196 |

Table 29．－Statistics of universities and

|  | Location． | Name． | $\begin{gathered} \text { Year } \\ \text { of } \\ \text { first } \\ \text { open- } \\ \text { ing. } \end{gathered}$ | Religious or nonsecta－ rian con－ trol． | Professors and instructors． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Prepar－ atory depart－ ment． |  | Collegi－ ate de－ part－ ment． |  |
|  |  |  |  |  | 号 | $\begin{aligned} & \text { дं } \\ & \text { 日. } \\ & \text { B } \\ & \end{aligned}$ | 号 |  |
|  | 1 | ${ }^{2}$ | 3 | 4 | 5 | 6 | \％ | \％ |
|  | MASSACHUSETTS continued． |  |  |  |  |  |  |  |
| 19\％ | Williamstown | Williams College | 1793 | Nonsect． | 0 | 0 | 30 | 0 |
| 198 | Worcester．．．－ | Clark University | 1889 | Nonsect． | 0 | 0 | 11 | 0 |
| 19） | －．－．do．．．．． | College of the Holy Cross | 1843 | R．C． | 11 | 0 | 19 | 0 |
|  | MICHIGAN． |  |  |  |  |  |  |  |
| 200 | Adrian．． | Adrian College | 1859 | Meth．Prot | 3 | 2 | \％ | 5 |
| 201 | Albion ． | Albion College | 1813 | M．E．．．－．－． | 7 | 5 | 11 | 1 |
| $21 \%$ | Alma． | Alma College | 1887 | Piesb | 7 | 4 | 8 | 4 |
| 243 | Ann Arbor | University of Michigan | 1837 | State | 0 | 0 | 118 | 8 |
| 204 | Detroit | Detroit College．－－－． | $18 \%$ | R．C …－．－－ | 8 | 0 | 10 | 0 |
| 205 | Hillsdale | Hillsdale College | 1855 | Free Bapt．－ | 2 | 2 | 7 | 1 |
| 203 | Holland | Hope College | 1865 | Reformed | 12 | 1 | 1： | 1 |
| 207 | Kalamazoo | Kalamazoo College | 185.5 | Bapt ．．．．．．． | 4 | 4 | 9 | 4 |
| 208 | Olivet． | Olivet College ．．．． | 1859 | Cong－－－－－－ | 4 | 8 | 10 | 3 |
|  | Minnesota． |  |  |  |  |  |  |  |
| 209 | Collegeville． | St．John＇s University | 185\％ | R．C | 10 | 0 | 20 | 0 |
| 210 | Minneapolis | Augsburg Seminary－ | 1869 | Iunth | 5 | 0 | 5 | 0 |
| 211 | ．．．－do．．．．．．－ | University of Minnesota | 1868 | State | as3 | at | 103 | 16 |
| $21 \%$ | Northfield | Carleton College | $18 \% 0$ | Cong | $\stackrel{2}{2}$ | 4 | 10 | 3 |
| 213 | －do | St．Olaf College | 18\％4 | Luth | 12 | 2 | 8 | ${ }^{6}$ |
| 214 | St．Paul | Hamline University | 1854 | M．E | \％ | 1 | 17 | 4 |
| 215 | －．．．do－－ | Macalester College． | 1885 | Pres | 5 | 2 | 8 | 2 |
| 216 | St．Peter－．．－－－．．．． | Gustavus Adolplius College | $180^{3}$ | Tuth | 8 | 2 | 9 | 1 |
| 217 | Winnebago City－．． | Parker College．．．．．．．．．．．．．．． | 1888 | Free Bapt．－ | 1 | 2 | 3 | 2 |
|  | Mississiple |  |  |  |  |  |  |  |
| 218 | Clinton－－．．．． | Mississippi College | 1852 | Bapt | 1 | 0 | 7 | 0 |
| 219 | Holly Springs | Rust University | 1868 | M．E | $\stackrel{9}{2}$ | 5 0 | 6 9 | $\underset{0}{2}$ |
| 220 | Jackson．．． University | Millsaps College | 1893 | M．E．So．．．． State | $\stackrel{2}{0}$ | 0 | 9 14 | 0 1 |
|  |  |  |  |  |  |  |  |  |
| 202 | Albany | Central Chiristian College． | $189 \%$ | Christian ．－ | 0 | 1 | 4 | 0 |
| 223 | Bolivar | Southwest Baptist College | 1878 | Bapt ．－．．．－－ | 2 | 1 | 5 | 1 |
| 224 | Bowling Green | Pike College－．．．－．．－．．－． | 1882 | Nonsect．．．－ | 0 | 2 | 1 | 3 |
| 2,5 | Cameron | Missouri Wesleyan College | 1887 | M．E．．．．．．．． | 5 | 6 | 4 | 2 |
| $2 \% 6$ | Canton | Christian University－．．． | 1853 | Christian ．－ |  |  | 17 | 3 |
| 227 | Cape Girardeau－ | St．Vincent College．．．－．． | 1843 | P．C－ | 4 | 0 | 4 | 0 |
| 228 | Clarksburg ．－．．． | Clarksburg Baptisct College－．．．－．．． | $18 \% 6$ | Bapt－－－－－－－ | 4 | 2 | 4 | 1 |
| 229 | Columbia | University of the State of Missouri． | 1811 | State－．．．．． | 0 | 0 | 58 | 3 |
| 230 | Edinburg ．－．－．．－． | Grand River Christian Union Col－ lege．＊ | 1850 | Clmistian－－ | 2 | 2 | 4 | 0 |
| 231 | Fayette |  | $1850 \%$ | M．E．So ．－． | 6 | 1 | 8 | 0 |
| 23\％ | Fuilton | Westminster College | 1853 | Presb ．－．．．． | 1 | 0 | 8 | 0 |
| 233 | Glasgow | Pritchett College． | 1866 | Nonsect ．．．． | 0 | 4 | 5 | 0 |
| 234 | La Grange ．－．－．．－－ | La Grange College | 1858 | Bapt ．－．－．－－ | 9 | 3 | 9 | 3 |
| 235 | Liberty－．．．－．．．．．．． | William Jewell College | 1849 | Bapt－－．．．－ | 18 | 0 | 10 | 0 |
| 236 | Marshall．－－－．－－－－－ | Missouri Valley College | 1889 | Cumb．Pres | 8 | 3 | 8 | 3 |
| 237 | Morrisville ．．．．．．－－ | Morrisville College＊${ }^{*}$ ．－．．．．．． | 187\％ | M．E．So．．． | 2 | 1 | 4 | 3 |
| 238 | Neosho ．－．．．－－－－－． | Scarritt Collegiate Institute． | 1888 | M．E．So．．．－ | 2 | 1 | 3 | 0 |
| 239 | Odessa ．．．．－－－－－－－－－ | Odessa College．－－－－．．－ | 1883 | Nonsect．．．－ | 0 | 1 | 2 | 2 |
| 240 | Parkville－－－．－－－－． | Park College－－－－－－－－－－－－－－－ | 1875 | Presb ．．．．．． | 5 | 7 | 10 | 0 |
| $\stackrel{211}{24}$ | St．Louis－－－－－－－－－ | Christian Brothers College | 1851 |  | 6 | 0 | 8 | 0 |
| 242 | －－－－do． | St．Louis University | 1899 | R．C．．．．．．．．．． | 10 | 0 | 14 | 0 |
| 243 | －．．．do－ | Washington University | 1859 | Nonsect．－．－ | 80 | 34 | 23 | 0 |
| 244 | Springfield ．－．．．．． | Drury College．．．． | 1873 | Nonsect．．．． | 7 | 4 | 9 | 3 |
| 245 | Tarkio－－．－－－－－－－－ | Tarkio College．．．－ | 1883 | Un．Presb． | 5 | 4 | 4 | 3 |
| 246 247 | Wrenton－－ | Avalon College Central Wesleyan College | 1869 | U．B．E．－．－－－ | 5 4 4 | $\stackrel{\square}{1}$ | ${ }_{6}^{5}$ | $\stackrel{2}{0}$ |

[^108]colleges for men and for both sexes－Continued．

|  | 00000 | 000粏0芶以 | $0040005000$ | 000 | （3） | Men． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0000 | 000000400 | 000000000 | 000 | $\stackrel{*}{*}$ | Women． |  |  |
|  | 20000 |  |  | S゙ち | $\cdots$ | Men． |  |  |
| 2020－700\％ | －0000 | －00004200800 |  | 000 | ${ }^{60}$ | Women． |  |  |
|  | c®ete |  |  | 发00 | 吅 | Men． |  | 成 |
|  | co事。 |  |  | 000 | $\pm$ | Women． |  |  |
|  | に無0． |  |  | 品口堨 | \％ | Men． |  |  |
|  | 29， 200 |  |  | 000 | $\cdots$ | Women． |  |  |
| $=000 \infty \text { In0000000.00t 0iNe0 0000 }$ | 20000 | 000000总00 | oocreromo | csici | \％ | Men． |  |  |
| 00e＝1000000000000 00．00：0000 | 10000 | 000000800 | 000200000 | 000 | 3 | Women． |  |  |
| coe=rocococ=ivoro oce0: ceos | Feeo | coovoivoco | ococciuotio | 000 | 石 | Vien． | 400000000 |  |
| 0000000000000000 0000， | － 000 | 000n00000 | cococrewo | 000 | 4 | Women． |  |  |
|  | $\mathscr{*}$ |  | oo \%ivo | 000 | ${ }_{0}^{*}$ | Men． |  |  |
| 00000000000000000 0000：000 | 0000 | 000000 家00 | 000wonoco | 000 | 8 | Women． |  |  |
| Tand |  |  |  | ※®\％ |  |  |  |  |

TABLE 29．－Stat stics of universities and

|  | Location． | Name． | Year of first open－ ing． | Religious or nonsecta－ rian con－ trol． | Professors and instructors． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Prepar－ atory depart－ ment． |  | Collegi ate de－ part－ ment． |  |
|  |  |  |  |  | 呇 | $\begin{aligned} & \text { a゙ } \\ & \text { घ } \\ & \text { B } \end{aligned}$ | 告 | ¢ ¢ ¢ B |
|  | 1 |  | ： 3 | 4 | 5 | 6 | 7 | 8 |
|  | MONTANA． |  |  |  |  |  |  |  |
| 248 | Helena | Montana Wesleyan University＊ | 1890 | M. E. ......... | J | $\frac{1}{6}$ | 4 | 3 |
| 249 | Missoula ．．．．．．．．．．．．． | University of Montana ．．．．．．．．－． | 1895 | State．．．．．．．－ | 8 | 6 | 8 | 6 |
|  | NEBRASKA． |  |  |  |  |  |  |  |
| 230 | Bellerue | Unirersity of Omaha | 1883 | Presb - ．．． | 5 | 4 | 6 | 4 |
| 251 | Bethany | Cotner University ．－． | 1889 | Christian | 1 | 4 | 4 | 4 |
| 25.2 | College View | Union College ．－．． | 1891 | 7 Day Adv ． | 8 | 4 | 13 | 3 |
| 253 | Crete | Doane College | 18\％\％ | Cong ．．．．．．． | \％ | 2 | 6 | 1 |
| 254 | Grand Island | Grand İsland College | 1892 | Bapt | 5 | 4 | 5 | 2 |
| 255 | Hastings | HastingsCollege | 188： | Presb | 6 | 3 | 6 | 2 |
| 256 | Lincoln． | University of Nebraska | 18.1 | State |  |  | ＇＇8 | 15 |
| $25 \%$ | Omaha． | Creighton University ．． | 1879 | R．C | 6 | 0 | 8 | 0 |
| 258 | University Place | Neloraska Wesleyan University | 1888 | M．E． | 13 | G | 11 | $\stackrel{2}{2}$ |
| 259 | York | York College．．．．．．．．．．．．．．．．．．．．．．．．．．． | 1890 | U．B． | 6 | 4 | 3 | $\stackrel{3}{2}$ |
|  | NEYADA． |  |  |  |  |  |  |  |
| 260 | Reno | Nerada State L＇niversity | 1886 | State | 5 | 4 | 21 | 4 |
|  | NEW MAMPSEIRE． |  |  |  |  |  |  |  |
| 201 | Hanover | Dartmonth College ． | 1759 | Nonsect．．．． | ${ }^{8}$ | 0 | 46 | 0 |
| $26 \%$ | Manchestel | St．Anselm＇s College | 1893 | R．C．．． | 8 | 0 | 10 | ${ }^{0}$ |
|  | NEW JERSEY． |  |  |  |  |  |  |  |
| 263 | Jersey City | St．Peter＂s College | $15 \% 8$ | R．C．．．．．．．． | 6 | 0 | 6 | 0 |
| 264 | Newark．．．． | St．Benedict＇s College | 1868 | R．C．．．．．－ | 6 | 0 | 8 | 0 |
| 265 | New Brunswick | Rutgers College．－－ | 1766 | Reformed－－ | 6 | 5 | $\because 8$ | 0 |
| 266 | Princeton | Princeton University | 1746 | Nonsect．．．－ | 0 | 0 | 80 | 0 |
| $26 \%$ | Soutin Orange | Seton Hall College．．． | 1856 | R．C．．．．．．．． | 8 | 0 | 9 | 0 |
|  | NEW MEATCO． |  |  |  |  |  |  |  |
| 263 | Albuquerque－．．．．－ | University of New Mexico | $159{ }^{\circ}$ | Territory．． | 10 | 2 | 12 | 2 |
|  | NEW YORK． |  |  |  |  |  |  |  |
| 263 | Aifred．． | Alfred Unicersity ．．． | 1336 | \％Day Bapt | 5 | 3 | 15 | 4 |
| 270 | Allesayy－－－－－－－ | St．Bonarenture＇s College | 1859 | R．C．－．－．－ | 4 | 0 | 13 | 0 |
| 271 | Amnandale．．．．．．．．－ | St．Stephen＇s College．．．． | 1860 | P． E － | 2 | 0 | \％ | ${ }^{0}$ |
| $2 \%$ | Brooklyn ．－．．－．．．． | Adelphi College ．－．．．．．．．．．．．．．．．．．．．． | 1896 | Nonsect．．．． | 22 | 43 | 18 | 9 |
| $2 \% 3$ | －－－－do－．－－－－－－－－－－－ | Polytechnicinstitute of Brooklyn | 1855 | Nonsect．．．． | 29 | 4 | 19 | 0 |
| $2 \%$ | －．－－do | St．Francis College－．．．．．．．．．．．． | 1859 | R．C．．．．．．．． | 13 | 0 | 14 | 0 |
| 275 | do | St．John＇s College ． | 1870 | P．C | 10 | 0 | 9 | 0 |
| 216 | Butfalo | Canisius College． | $18 \% 0$ | R．C | 18 | 0 | 10 | 0 |
| 277 | Canton． | St．Lawrenco University | 1859 | Univ | 0 | 0 | 9 | 0） |
| 278. | Clinton． | Hamilton College－．．．．．．． | 1812 | Nonsect | 0 | 0 | 19 | 0 |
| 279 | Geneva．． | Hobart College－．．．． | 182\％ | P．E－－． | 0 | 0 | 16 | 0 |
| 280 | Hamilton | Colgate Univeirsity． | 1819 | Bapt ．－．．． | 7 | 0 | 17 | $\stackrel{0}{\sim}$ |
| 281 | Ithaca．． | Cornell University－－．－．．．．．． | 1868 | Nonsect．．． | ${ }_{\sim}^{0}$ | 0 | 223 | \％ |
| $28 \%$ | New Yorlk | College of St．Francis Xavier－－－．－ | $184 \%$ | R．C． | 17 | 0 | 2\％ | 0 |
| 283 | －．．do． | College of the City of New York． | 1849 | City ．－．．．－．． | 18 | 0 | 4＊ | 0 |
| 284 | ．．．－do | Columbia University ．．．．．．．．．．．．．．． | 1754 | Nonsect．．．． | 0 | 0 | 168 | 0 |
| 285 | ．．．．do | Manhattan College．．． | 1863 | R．C．．．． | $\stackrel{7}{6}$ | 0 | 19 | 0 |
| 286 | ．－．－do | New York University | 1831 | Nonsect． | ${ }^{0}$ | 0 | 54 | 0 |
| 287 |  | St．John＇s C＇ollege ．－．． | 1846 | R．C | 18 | 0 | 16 | 0 |
| 288 | Niagara University | Niazara Univer＇sity ．．．．． | 18.56 | R．C | 12 | 0 | 15 | 0 |
| 289 | Rochester．．．．．．．．．． | University of Rochester－．．．．．．．．．．．． | 1850 | Bapt．．． | 0 | 0 | 16 | 0 |
| 290 | Schenectady．．－．．．－ | Union College－－－－．．．．．．．．． | 1793 | Nonsect．．．－ | 0 | 0 | 21 | 0 |
| 291 | Syracuse．．．．．．．．．．．． | Syracuse University | $18 \% 1$ | M．E． | 0 | 0 | 35 | 3 |

[^109]colleges for men and for both sexes－Continued．

| Professors and instruct－ ors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de－ partments． |  | Total num－ ber（exciud－ ing dupli－ cates）． |  | Prepara－ tory de－ partment． |  | Collegiate department． |  | Graduate department． |  |  |  | Professional depart－ ments． |  |  |
|  |  | Resi | ent． |  |  | Nonr | ident． |  |  |  |
| $\begin{aligned} & \text { d } \\ & \text { en } \end{aligned}$ | $\begin{aligned} & \text { घं } \\ & \text { g } \\ & \text { है } \\ & 8 \end{aligned}$ |  |  | 皆 | $\begin{aligned} & \text { है } \\ & \text { g } \\ & \text { B } \end{aligned}$ |  |  | 豆 | $\begin{aligned} & \text { ́ } \\ & \text { g̈ } \\ & \text { ह } \end{aligned}$ | $\begin{aligned} & \text { ä } \\ & \text { 总 } \end{aligned}$ | $\begin{aligned} & \text { च̈ } \\ & \text { g } \\ & \text { ह } \\ & \end{aligned}$ | 袻 | $\begin{aligned} & \text { घं } \\ & \text { む } \\ & \text { o } \\ & \text { B } \end{aligned}$ | 立 | $\begin{aligned} & \text { घं } \\ & \text { g } \\ & 0 \\ & B \end{aligned}$ | 吾 |  |  |
| P | 14） | 1 1 且 | 13 | 18 | 14 | 15 | 16 | 198 | 18 | 19 | （3） | P1 | 9\％ |  |
| 0 0 | 0 0 | 8 | 8 | 37 35 | 30 45 | 8 30 | ${ }_{3}^{2}$ | 0 0 | 0 9 | 0 0 | 0 0 | 0 0 | 0 0 | 248 249 |
| 46 | 0 | $5 \%$ | 4 | 26 | 30 | 24 | 20） | 0 | 0 | 0 | 0 | 215 | 11 | 230 |
| 23 | 0 | 27 | 5 | 28 | 14 | 11 | 7 | 0 | 0 | 0 | 0 | 68 | 7 | 251 |
| 11 | 0 | 21 | 7 | 214 | 199 | 57 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 202 |
| 0 | 0 | 9 | 9 | 40 | 21 | 37 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 20） 3 |
| 0 | 0 | 6 | 5 | 44 | 13 | 15 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 2.4 |
| 0 | 0 | 8 | 4 | 46 | 32 | 24 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 255 |
| 7 | 0 | 85 | 15 | 2 3 2 | 93 | 573 | 498 | 87 | 53 | 4 | 4 | 161 | 0 | 256 |
| 42 | 1 | 56 | 1 | 103 | 0 | 61 | 0 | 0 | 0 | 0 | 0 | 127 | 15 | 2.57 |
| 0 | 0 | 15 | 7 | 145 | 137 | 71 | 55 | 0 | 2 | 0 | 0 | 0 | 0 | 258 |
| 0 | 0 | 6 | 4 | 56 | 80 | 13 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | ：209 |
| 0 | 0 | 21 | 4 | 67 | 70 | 91 | 85 | 7 | 4 | 0 | 0 | 0 | 0 | 2160 |
| 16 | 0 | 62 | 0 | 0 | 0 | 631 | 0 | 5 | 0 | 0 | 0 | 118 | 0 | 261 |
| 0 | 0 | 18 | 0 | 41 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | $23 \%$ |
| 0 | 0 | 12 | 0 | 110 | 0 | $4 \pi$ | 0 | 0 | 0 | 4 | 0 | 0 | 0 | ：263 |
| 0 | 0 | 10 | 0 | 24 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 264 |
| 0 | 0 | 33 | 5 | 127 | 45 | 184 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 265 |
| 0 | 0 | 80 | 0 | 0 | 0 | 1，053 | 0 | 13.2 | 0 | 9 | 0 | 0 | 0 | 265 |
| 5 | 0 | 22 | 0 | $5 \%$ | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 267 |
| 0 | 0 | 12 | 2 | 28 | 104 | 12 | 2 | 2. | 0 | 2 | 0 | 0 | 0 | 238 |
| 3 | 0 | 20 | 6 | 59 | 59 | 50 | 25 | 1 | 0 | 0 | 0 | 2 | 0 | 289 |
| 6 | 0 | 16 | 0 | 20 | 0 | 75 | 0 | 12 | 0 | 0 | 0 | 64 | 0 |  |
| 0 | 0 | 9 | 0 | 22 | 0 | $3 \%$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $2 \% 1$ |
| 0 | 0 | 24 | 52 | 371 | 411 | 13 | 123 | 0 | 1 | － 0 | 0 | 0 | 0 | 2\％ |
| 0 | 0 | 48 | 4 | 522 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 273 |
| 0 | 0 | 27 | 0 | 243 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 274 |
| 8 | 0 | 18 | 0 | 97 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 51 | 0 | 275 |
| 0 | 0 | 38 | 0 | $2 \geqslant 3$ | 0 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $2 \sim 6$ |
| 5 | 0 | 14 | 0 | 0 | 0 | 65 | 33 | 0 | 0 | 6 | 6 | 13 | 3 | $27 \%$ |
| 0 | 0 | 19 | 0 | 0 | 0 | 155 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 278 |
| 0 | 0 | 16 | 0 | 0 | 0 | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 1） | 279 |
| 7 | 0 | 31 | 0 | 140 | 0 | 153 | 0 | 0 | 0 | 0 | 0 | 46 | 0 | 280 |
| 123 | 0 | 314 | 7 | 0 | 0 | 1，318 | 266 | 14： | 32 | 0 | 0 | 470 | 71 | 281 |
| 0 | 0 | 39 | 0 | 346 | 0 | 1，149 | 0 | 0 | 0 | 51 | 0 | 0 | 0 | 28： |
| 0 | 0 | 60 | 0 | 776 | 0 | 1，032 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 283 |
| 182 | 0 | 350 | 0 | 0 | 0 | 956 | 0 | 329 | 0 | 0 | 0 | 1， 1.67 | 0 | 284 |
| 0 | 0 | 26 | 0 | 553 | 0 | 133 | 0 | 0 | 0 | 0. | 0 | 0 | 0 | 28.5 |
| 129 | 0 | 183 | 0 | 0 | 0 | 396 | 141 | 134 | 67 | 0 | 0 | 918 | 38 | 286 |
| 0 | 0 | 27 | 0 | 156 | 0 | 102 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 287 |
| 8 | 0 | $1 \%$ | 0 | 74 | 0 | ${ }_{6} 1$ | 0 | 0 | 0 | 0 | 0 | 47 | 0 | 288 |
| 0 | 0 | 10 | 0 | 0 | 0 | 188 | 0 | 3 | 0 | 8 | 0 | 0 | 0 | 289 |
| 0 | 0 | \％1 | 0 | 0 | 0 | 182 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 290 |
| $6 \%$ | 1 | 118 | 13 | 0 | 0 | 445 | 26.5 | 11 | 18 | 0 | 0 | 204 | 14 | 291 |

Table 29.-Statistics of universities and

|  | Location. | Name. | $\left\lvert\, \begin{gathered} \text { Year } \\ \text { of } \\ \text { first } \\ \text { opent- } \\ \text { ing. } \end{gathered}\right.$ | Religious or nonsectarian control. | Professors and instructors. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Preparatory department. |  | Collegi ate de-partment. |  |
|  |  |  |  |  | 突 | cin | 咹 | ¢ |
|  | 1 | 2 | 8 | 4 | 5 | 6 | 7 | 8 |
|  | NORTH CAROLINA. |  |  |  |  |  |  |  |
| 298 | Belmont | St. Mary's College ............. | 1878 | R. C | 3 | 0 | 9 | 0 |
| 293 | Chapelhill | University of North Carolina | 1195 | State | 0 | 0 | 23 | 0 |
| 294 | Charlotte | Biddle University .-. .-.-- -- | 1807 | Presb | 6 | 0 | 9 | 0 |
| 295 | Davidson | Davidson College | 1837 | Presb -- | $\stackrel{0}{7}$ | 0 | 10 | 0 |
| 296 | Durham | Trinity College.- | 1851 | M.E.So.... | 7 | 0 | 17 | 0 |
| 297 | Elon College | Elon College | 1890 | Christian. |  |  | 7 | 3 |
| 29.8 | Guilford College | Guilford College | $183 \%$ | Friends.. | 0 | 3 | 6 | 3 |
| 299 | Hickory | Lenoir College. | 1891 | Luth. | 0 | 1 | 4 | 0 |
| 300 | Mount Pleasant | North Carolina College | 1859 | Luth......- | 2 | 0 | 3 | 0 |
| 301 | Newton. | Cataw ba College ...... | 1851 | Reformed. | 6 | 3 | 6 | 2 |
| $30 \%$ | Raleigh -....-...... | Shaw University --- | 1865 | Bapt .-....- | 2 | 5 | 4 | 2 |
| 303 | Rutherford College. | Rutherford College* | 1853 | Nonsect ... | 0 | 3 | 5 | 0 |
| 304 | Salisbury .-. . . . . . | Livingstone College | 188* | $\begin{aligned} & \text { A. M. E. } \\ & \text { Zion. } \end{aligned}$ | 0 | 4 | 5 | 0 |
| 303 | Wake Forest | Wake Forest College | 1834 | Bapt-...... | 0 | 0 | 13 | 0 |
| 306 | Weaverville...-...- | Weaverville College | $18 \% 3$ | M. E. So | 2 | 2 | $:$ | 3 |
|  | NORTH DAKOTA. |  |  |  |  |  |  |  |
| 307 | Fargo | Fargo College - | $188 \%$ | Cong | 5 | 4 | 5 | 4 |
| 318 | University | University of North Dakota | 1884 | State | 13 | 3 | 13 | 3 |
| 309 | Wahpeton | Red River Valley Univer'sity | $189 \%$ | M. E | 3 | 2 | 4 | 2 |
|  | OHIO. |  |  |  |  |  |  |  |
| 310 | Akron .............. | Buchtel College | $18 \%$ | Univ .-....- | 3 | 1 | 8 | 2 |
| 311 | Alliance ..-.-.-.-. | Mount Union College | 1846 | M. E.-.-...- | 7 | 4 | 9 | 2 |
| $31 \%$ | Athens. | Ohio University -- | 1809 | State | 12 | 5 | 15 | 8 |
| 313 | Berea | Baldwin Unversity | 1845 | M. E | 1 | 1 | 7 | 1 |
| 314. | .... do | German Wallace College | $186 \frac{1}{2}$ | M. E.-.-... | 3 | 0 | 8 | 0 |
| 315 | Cedarville | Cedarville College.... | 1894 | Ref. Presb. | 3 | 1 | 5 | 3 |
| 316 | Cincinnati | St. Xavier College | 1840 | R. C.-..... | 14 | 0 | 9 | 0 |
| 317 | ...-do | University of Cincinnati | 1874 | City | 0 | 0 | 28 | 1 |
| 318 | Cleveland | St. Ignatius College | 1886 | R. C. | 8 | 0 | 7 | 0 |
| 319 | -...-do | Western Reserve University | 18:6 | Nonsect | 5 | 6 | 45 | 5 |
| $3: 0$ | Columbu | Capital University | 1850 | Luth .-..... | 7 | 0 | 9 | 0 |
| $3 \% 1$ | .....do | Ohio State University | 1870 | State .-..... | 0 | 0 | 103 | 5 |
| 32;3 | Defiance | Defiance College | 1885 | Christian .. | 2 | 2 | 5 | 2 |
| 323 | Delaware | Ohio Wesleyan University | 1844 | M. E.-...-. | 19 | 15 | 22 | 5 |
| $3 \cong 4$ | Findlay | Findlay College ---........ | 1886 | Church of God. | 4 | 0 | 4 | 0 |
| 325 | Gambier .-.....-. -- | Kenyon College | 1825 | P. E | 10 | 0 | 10 | 0 |
| $3 \% 6$ | Granville .........- | Denison University | 1831 | Bapt ------- | 8 | 0 | 13 | 0 |
| 327 | Hiram | Hiram College...... | 1850 | Christian .. | 13 | 2 | 12 | 0 |
| 328 | Lima | Lima Colloge - | 1893 | Luth .-...-. | 3 | 2 | 3 | 2 |
| 329 | Marietta | Marietta College | 1835 | Nonsect -.- | 3 | 2 | 12 | 1 |
| 330 | New Athens | Franklin College* | 18:5 | Nonsect ... | 3 | 3 | 4 | 3 |
| 331 | New Concord | Muskingum College | 1837 | Un. Presb.. | 7 | 1 | $\times$ | 1 |
| 332 | Oberlin .--...----. | Oberlin College .-. | 1833 | Nonsect .-. | 8 | 9 | 23 | 10 |
| 333 | Oxford... | Miami University -- | 1894 | State----. | 8 | $\stackrel{0}{0}$ | 13 | 0 |
| 384 | Richmond | Richmond College* | 1835 | Nonssct -.- | 5 | $\stackrel{2}{3}$ | 5 | 2 |
| 385 | Rio Grande | Pio Grande College | $18 \% 6$ | Free Bapt.- | 3 | 3 | 3 | 3 |
| 336 | Scio ----- | Scio College. --....- | 1857 | M. E......... | 2 | 1 | 7 | 1 |
| $33 \%$ | Springfiela | Wittenberg College | 1845 | Luth-.---- | 6 | 1 | 11 | 1 |
| 338 | Tiffin | Heidelberg Univer'sity | 1850 | Reformed.- | 8 | 2 | 12 | 2 |
| 339 | Westerville | Otterbein University ... | 1847 | U. B...... | 5 | 1 | 11 | 1 |
| 340 | Wilberforce | Wilberforce University* | 1856 | A. M. E..... | 4 | 4 | 6 | 2 |
| 341 | Wilmington | Wilmington College..... | 1870 | Friends | 2 | 2 | 4 | 2 |
| $34 \stackrel{ }{2}$ | Wooster -....... | University of Wooster | 1870 | Presb | 11 | 2 | 17 | 3 |
| 343 | Yellow Springs.... | Antioch College ..... | 1853 | Nonsect -.. | 4 | 4 | \% | 3 |
|  | OKLAHOMA. |  |  |  |  |  |  |  |
| 344 | Norman .-...-...... | University of Oklahoma_... | $189 \%$ | Territory -- | 11 | 1 | 10 | 1 |

* Statistics of $1893-99$.
colleges for men and for both scxes－Continued．

| Professors and instruct－ ors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de partments |  | Total num－ ber（exclud－ ing dupli－ cates）． |  | Prepara－ tory de－ partment． |  | Collegiate department． |  | Graduate department． |  |  |  | Professional depart－ ments． |  |  |
|  |  | Resident． | Nonresident． |  |  |  |  |  |  |
| 苞 |  |  |  | ⿷匚 |  | $\underset{\sim}{\dot{y}}$ | $\begin{aligned} & \text { घं } \\ & \text { घ } \\ & \text { ह } \end{aligned}$ | 㟉 | $\begin{aligned} & \text { घं } \\ & \text { घ } \\ & \text { ह } \end{aligned}$ | $\frac{\dot{2}}{\stackrel{0}{2}}$ |  | 息 | $\begin{aligned} & \text { घं } \\ & \text { 華 } \\ & \text { B } \end{aligned}$ | $\begin{aligned} & \text { a゙ } \\ & \text { ترㄹ } \end{aligned}$ | $\begin{aligned} & \text { घं } \\ & \text { 合 } \\ & \text { B } \end{aligned}$ |  |
| 9 | 10 | 目通 | 18 |  |  | 2 3 | 13 | 15 | 16 | 1\％ | 18 | 19 | （3） | 思是 | 82 |  |
| 4 | 0 | 16 | 0 | 35 | 0 | \％ | 0 | 3 | 0 | 0 | 0 | 14 | 0 | 292 |
| 15 | 0 | 85 | 0 | 0 | 0 | 337 | 8 | 12 | 1 | 13 | 0 | 114 | 0 | 293 |
| 4 | 0 | 13 | 0 | $10 \%$ | 0 | 114 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 294 |
| 2 | 0 | 10 | 0 | 0 | 0 | 160 | 0 | 4 | 0 | 13 | 0 | 38 | 0 | 295 |
| 0 | 0 | 24 | 0 | 84 | 5 | 130 | 19 | 13 | 3 | 0 | 0 | 0 | 0 | 293 |
| 0 | 0 | 7 | 3 | 30 | 20 | 60 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | $\stackrel{297}{ }$ |
| 0 | 0 | 6 | 4 | 48 | 50 | 69 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 298 |
| 1 | 0 | 4 | 3 | 30 | 30 | 50 | 6 | 0 | 0 | 0 | 0 | 20 | 0 | 293 |
| 0 | 0 | 4 | 0 | 34 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 300 |
| 0 | 0 | 6 | 3 | 80 | 59 | 17 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | $\because 01$ |
| 14 | 0 | 18 | 9 | 28 | 38 | 17 | 10 | 0 | 0 | 0 | 0 | 125 | 0 | 302 |
| 1 | 0 | 6 | 3 | 20 | 20 | 50 | 30 | 0 | 0 | 0 | 0 | 6 | 0 | 303 |
| 0 | 0 | 5 | 4 | 70 | 60 | 35 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 304 |
|  |  | 13 |  | 0 | 0 | 251 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 305 |
| 0 | 0 | 2 | 3 | 90 | 56 | 35 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 306 |
| 0 | 0 | 6 | 4 | 28 | 35 | 12 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 307 |
| 17 | 0 | 33 | 3 | 94 | 16 | 49 | 20 | 2 | 3 | 4 | 0 | 19 | 0 | 308 |
| 0 | 0 | 5 | 3 | 15 | 10 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 309 |
| 0 | 0 | 11 | ¢ั | 47 | 49 | 34 | 54 | 0 | 0 | 0 | 0 | 0 | 0 | 310 |
| 0 | 0 | 15 | 9 | 119 | 70 | 55 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 311 |
| 0 | 0 | 15 | 8 | $20 \%$ | 104 | 77 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 312 |
| 11 | 0 | 22 | 2 | 22 | 19 | 31 | 17 | 1 | 1 | 1 | 0 | 107 | 0 | 313 |
| 4 | 0 | 15 | 0 | 71 | 26 | 36 | 12 | 0 | 0 | 0 | 0 | 30 | 0 | 314 |
| 0 | 0 | 5 | 3 | 18 | 12 | 21 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 315 |
| 0 | 0 | 23 | 0 | 320 | 0 | 120 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 316 |
| $11 \pm$ | 0 | 142 | 1 | 0 | 0 | 250 | 336 | 30 | 35 | 11 | $1 \%$ | 784 | 30 | 317 |
| 0 | 0 | 15 | 0 | 174 | 0 | 37 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 318 |
| 92 | 0 | 137 | 11 | $7 \%$ | 33 | 193 | 171 | 8 | 9 | 0 | 0 | 336 | 0 | －319 |
| 4 | 0 | 9 | 0 | 18 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 320 |
| 7 | 0 | 110 | 5 | 0 | 0 | 845 | $17 \%$ | 32 | 13 | 0 | 0 | 199 | 2 | 321 |
| 3 | 0 | 8 | 4 | 32 | 50 | 10 | 7 | 1 | 2 | 3 | 0 | 4 | 9 | 322 |
| 43 | 1 | 81 | 18 | 276 | 102 | 306 | 233 | $\stackrel{1}{2}$ | 2 | 24 | 1 | 83 | 2 | 323 |
| 1 | 0 | 4 | 0 | 14 | 5 | 9 | 2 | 0 | 0 | 0 | 0 | 1.5 | 1 | 3.4 |
| 4 | 0 | 24 | 0 | 89 | 0 | 96 | 0 | 0 | 0 | 0 | 0 | $1 \%$ | 0 | 325 |
| 0 | 0 | 21 | 0 | 133 | 44 | 136 | 68 | 0 | 0 | 0 | 0 | 0 | 0 | 326 |
| 0 | 0 | 30 | 6 | 110 | 94 | 112 | 48 | 3 | 1 | 3 | 0 | 0 | 0 | 327 |
| 0 | 0 | 5 | 3 | 19 | 18 | 12 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 328 |
| 0 | 0 | 14 | $\stackrel{2}{2}$ | 47 | 41 | 62 | 23 | 0 | 2 | 1 | 0 | 0 | 0 | 329 |
| 0 | 0 | 7 | 3 | 19 | 16 | 55 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 330 |
| 0 | 0 | 9 | 6 | 47 | 20 | 54 | 35 | 0 | 0 | 0 | 0 | ${ }^{0}$ | ${ }_{0}$ | 331 |
| 7 | 0 | 55 | 28 | 198 | 139 | 187 | 221 | 3 | 6 | 0 | 0 | 38 | 2 | 332 |
| 0 | 0 | 16 | 0 | 45 | 11 | 69 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 333 |
| 0 | 0 | 5 | 2 | 20 | 14 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 334 |
| 0 | 0 | 4 | 3 | 22 | 18 | 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 335 |
| 0 | 0 | 9 | 2 | 18 | 17 | 35 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 336 |
| 4 | 0 | 19 | 6 | 90 | 25 | 100 | 43 | 0 | 0 | 0 | 0 | 25 | 0 | 337 |
| 4 | 0 | 24 | 4 | 190 | 46 | 70 | 46 | 0 | 0 | 0 | 0 | 17 | 0 | 338 |
| 0 | 0 | 11 | 1 | 67 | 41 | 55 | 45 | 0 | 1 | 1 | 0 | 0 | 0 | 339 |
| 4 | 0 | 13 | 7 | 28 | 31 | 76 | 82 | 0 | 0 | 0 | 0 | 23 | 1 | 340 |
| 0 | 0 | 6 | 2 | 28 | 50 | 31 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 311 |
| 0 | 0 | 19 | 8 | 84 | 65 | 141 | 86 | 0 | 0 | 0 | 0 | 0 | 0 | 342 |
| 0 | 0 | 9 | 5 | 27 | 41 | 32 | 16 | 1 | 0 | 0 | 0 | 0 | 0 | 343 |
| 4 | 0 | 15 | 1 | $11 \%$ | 54 | 23 | 19 | 2 | 0 | 0 | 0 | 44 | 4 | 344 |

Table 29.-Statistics of riniversities and

|  | Location. | Name. | $\begin{gathered} \text { Year } \\ \text { of } \\ \text { frst } \\ \text { open- } \\ \text { ing. } \end{gathered}$ | Religious or nonsectarian control. | Professors and instructors. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Preparatory department. |  | Collegiate de partment. |  |
|  |  |  |  |  | 号 | ¢ ¢ a B | 号 | ¢ु ¢ ¢ ह |
|  | 1 | 9 | i3 | 4 | 5 | 0 | g | $s$ |
|  | OREGON. |  |  |  |  |  |  |  |
| 345 | Albany | Albany College....- | 1863 | Presb .-.-.- | 4 | 4 | ก | 1 |
| 346 | Eugene - | University of Oregon | 18.6 | State. |  |  | 21 | 2 |
| 347 | Forestgrove | Pacific University | 1854 | Cong | 3 | 2 | $\underset{\sim}{1}$ | 2 |
| 348 | McMinnville | McMinnville College | 1858 | Bapt | 1 | 1 | 5 | 2 |
| 349 | Newberg | Pacific Collego... | 1891 | Friend | 2 | 3 | 3 | 3 |
| 350 | Philomath | Philomath College | 1867 | U. B. | 1 | 1 | 3 | () |
| 351 | Salem...- | Willamette University | 1814 | M. E | 5 | 3 | 5 | 1 |
|  | PENNSYLVANIA. |  |  |  |  |  |  |  |
| $3 \breve{3}$ | Allegheny | Western University of Pennsyl- | 1819 | Nonsect | 0 | 0 | 16 | 0 |
| 353 | Ailentown | vania. <br> Muhlenberg College | 1867 | Lrath_...-. | $\stackrel{\sim}{2}$ | 0 | 10 | () |
| 354 | Annville | Lebanon Valley College | 1866 | U. H...-.... | 5 | 3 | 13 | 1 |
| 35.5 | Boatty | St. Vincent College .-. | 1845 | R. C | 10 | 0 | 9 | 0 |
| 356 | Beaver | Beaver College. | 1853 | M. E | 1 | 7 | 2 | 5 |
| 357 | Beaverfalls | Geneva College | 1849 | Ref. Presb. | 1 | 1 | 9 | 5 |
| 353 | Bethlehem | Moravian College | $180 \%$ | Moravian.- | 0 | 0 | 6 | 0 |
| 359 | Carlisle | Dickinson College | 1783 | M. E....---- | 6 | 0 | 18 | 1 |
| 300 | Chester | Pennsylvania Military Coll | 18.9 | Nonsect |  |  | 15 | 0 |
| 361 | Colleger | Ursinus College | 1870 | Reformed | 10 | 4 | 10 | 3 |
| $36: 2$ | Easton | Lafayette Colleg | 1833 | Presb..... | 0 | 0 | 50 | 0 |
| 363 | Gettysburg | Pennsylvania Colleg | 183? | Luth------ | 3 | 1 | 11 | () |
| 364 | Gieenville. | Thiel College --.-.-- | 1870 | Luth.---.. | 5 | 1 | \% | 0 |
| 365 | Grove City | Giove City College | 1884 | Nonsect | 8 | 7 | 9 | 0 |
| $366^{\circ}$ | Haverford | Haverford College | 1833 | Friends | 0 | 0 | 18 | 0 |
| $36 \%$ | Huntingdon | Juniata College | $18 \% 6$ | U. B. | 4 | 0 | 6 | 0 |
| 368 | Lancaster . | Franklin and Marshall Coll | 1836 | Reformed | 9 | 0 | 15 | 0 |
| 369 | Lewisburg --.-. | Bucknell University .-...-...- | 1845 | Bapt.-....- | 5 | 8 | 20 | 0 |
| $3{ }^{\text {\% }} 0$ | Eincoln University | Lincoln University | 185. | Yresb | 0 | 0 | \% | 0 |
| 371 | Meadrille....- .-- | Alleghen y College | 1815 | M.E....-- | 4 | 1 | 13 | 2 |
| 37 | Myerstown | Albright College. | 1881 | Un. Evang- | 3 | 1 | 9 | 5 |
| $3 \% 3$ | New Berlin. | Central Pennsylvania Collego | 1855 | Un. Erang. | 1 | 2 | 5 | 1 |
| 374 | New Wilmington | Westminster College .-...... | 185? | Un. Presb.- |  |  | 6 | 6 |
| 375 | Philadelphia...... | Central High School | $183 \%$ | City------ | 0 | 0 | 49 | 0 |
| 376 | -.-- do...- | La Salle College.-.- | $186 \%$ | R. C | 5 | 0 | 6 | 0 |
| 377 | --.-do | University of Pennsylvanis | $1 \% 40$ | Nonsec | 0 | 0 | 104 | 0 |
| 378 | Pittsburg. | Moly Ghost College ..... | 1873 | R. C | 10 | 0 | 10 | 0 |
| 379 | Selinsgrove | Susquehanna University | 1858 | Luth | 6 | 0 | 8 | 0 |
| 380 | South Bethlehem - | Lehigh University -...... | 1866 | Nonsect -. | ${ }^{0}$ | 0 | 40 | 0 |
| 381 | State College ----- | Pennsylvania State College ....... | 1859 | State | 3 | 1 | 35 | 3 |
| $38: 3$ | iswarthmore. | Swarthmore College.--.-.-.-....... | 1869 | Frionds | 0 | e | 16 | 8 |
| 38.3 | Villanova. | Villanova College. | 184 | R. C. | 6 | 0 | 13 | 0 |
| 381 | Volant - | Volant College | 1889 | Nonsect | 6 | \% | 3 | 0 |
| 385 | Washington | Washington and Jefferson College - | $180: 2$ | Presb | 6 | 0 | 14 | 0 |
| 386 | Waynesburg | Waynesburg College .-.-.---....- | 1851 | Cum. Presb | 4 | 1 | 8 | 3 |
|  | RHODE ISTANO. |  |  |  |  |  |  |  |
| $38 \sim$ | Proridence | Brown University ..........-.-.--- | 1764 | Bapt .-..... | 0 | 0 | \% 0 | 2 |
|  | SOUTH CAROLINA. |  |  |  |  |  |  |  |
| 388 | Charieston | College of Charleston ----.-.-.-. -- | 1791 | City | 0 | 0 | 7 | 0 |
| 389 | Clinton | Presbyterian College of South Carolina. | 1880 | Presb | 1 | 0 | 5 | 0 |
| 390 | Columbia | Allen University. -.-...-. .-.-.-.-. - . | 1881 | A. M. E -- | 0 | 6 | 5 | 0 |
| 391 | -_-. do. | South C'arolina College | 1805 | State .-.--- | 0 | 0 | 14 | 0 |
| 392 | Duewest | Erskine College --..- | 1839 | A. R. Pl'esb. | 1 | 0 | 7 | 0 |
| 393 | Greenville | Furman University | 185:2 | Bapt .-..... | 4 | 0 | 11 | 0 |
| 394 | Newberry | Newberry College.- | 1858 | Luth | 1 | 0 | 7 | 0 |
| 395 | Orangeburg | Clasin University | 1869 | M. E -- | 7 | 15 | 4 | 3 |
| 396 | Spartanburg | Wofford College. | 1854 | M. E. So | 2 | 0 | 8 | 0 |
|  | SOUTH DAKOTA. |  |  |  |  |  |  |  |
| 397 | Huron | Furon College | 1883 | Presb .-.... | 5 | 3 | 5 | 3 |
| 398 | Mitchell ----------- | Dakota University | 1885 | M. E ---.... | 6 | 1 | 7 | 0 |

colleges for men and for both sexes－Continued．

| Professors and instruct－ ors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de－ partments． |  | Total num－ ber（exclud－ ing dupli－ cates）． |  | Prepara－ tory de－ partment |  | Collegiate department． |  | Graduate department． |  |  |  | Professionsl depart－ ments． |  |  |
|  |  | Resident． | Nomresident． |  |  |  |  |  |  |
| $\begin{aligned} & \text { gig } \\ & \text { en } \end{aligned}$ | $\begin{aligned} & \text { घं } \\ & \text { है } \\ & \text { ह } \end{aligned}$ |  |  | $\begin{aligned} & \text { 号 } \\ & \hline 1 \end{aligned}$ | $\begin{aligned} & \text { घं } \\ & \text { घ̈ } \\ & \text { 䓪 } \end{aligned}$ | $\underset{\sim}{\text { E }}$ |  | $\underset{\text { H }}{\underset{H}{\text { d }}}$ | Ė1 \％ \％ |  | $\begin{aligned} & \text { घं } \\ & \text { घ } \\ & \text { है } \\ & \text { 2 } \end{aligned}$ | $\begin{gathered} \text { ভi } \\ \text { cin } \end{gathered}$ | $\begin{aligned} & \text { む் } \\ & \text { はै } \\ & \text { है } \end{aligned}$ | $\underset{y y y y}{y y}$ |  |  |
| 9 | 10 | 且1 | $1{ }^{18}$ |  |  | 18： | 且安 | 15 | 180 | 178 | 18 | 19 | 901 | 4 1 | 939 |  |
| 0 | 0 | 10 | 4 | 78 | 36 | 21 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 345 |
| 33 | 0 | 54 | 4 | 50 | 25 | 70 | 35 | 2 | 5 | 3 | － 0 | $6:$ | 6 | 316 |
| 0 | 0 | 10 | $t$ | 121 | 72 | 34 | 16 | 2 | 0 | 0 | 0 | 0 | 0 | 347 |
| 0 | 0 | 5 | 3 | 5 | 4 | 39 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 343 |
| 0 | 0 | \％ | 6 | 35 | 30 | 26 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 349 |
| 0 | 0 | 4 | 1 | 38 | 48 | 19 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 359 |
| 27 | 0 | 41 | ${ }_{6}$ | 79 | 67 | 11 | 11 | 0 | 1 | 0 | 0 | 51 | ？ | 251 |
| 93 | 0 | 11.2 | 0 | 0 | 0 | 156 | 8 | 0 | 0 | 0 | 0 | 6.31 | 5 | 3.2 |
| 0 | 0 | 12 | 0 | 34 | $\theta$ | 98 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 373 |
| （） | 0 | 18 | 3 | 51 | 27 | 99 | 20 | 25 | 3 | 0 | 0 | 0 | 0 | 35. |
| 5 | （） | 21 | 0 | 115 | 0 | 113 | 0 | 0 | 0 | 0 | 0 | 4： | 0 | 355 |
| 0 | 0 | 7 | 11 | 16 | 49 | 3 | 15 | 0 | 1 | 0 | 0 | 0 | 0 | 355 |
| 0 | 0 | 9 | 5 | 78 | 36 | 23 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | $35 \%$ |
| 4 | 0 | 6 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 8 | 0 | 14 | 0 | 338 |
| 9 | 0 | 39 | 1 | $7 \frac{1}{4}$ | 16 | $23: 2$ | 30 | 0 | 0 | 3 | 1 | 111 | 1 | 359 |
| 0 | 0 | 15 | 0 | 24 | 0 | 116 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 360 |
| 7 | 0 | $\stackrel{2}{ }$ | 5 | 63 | 10 | 73 | \％ | 1 | 0 | 0 | 0 | 3 ！ | 0 | 361 |
| 0 | 0 | 30 | 0 | 0 | 0 | 30.5 | 0 | 8 | 0 | 28 | 0 | （） | 0 | $36 \%$ |
| 0 | 0 | 14 | 1 | 48 | 16 | 173 | 9 | 0 | 1 | 2 | 0 | 0 | 0 | 363 |
| 0 | 0 | 8 | 1 | 31 | 18 | 41 | 24 | 0 | 0 | 0 | （） | 0 | 0 | 364 |
| 0 | 0 | 12 | $\underset{\sim}{1}$ | 161 | 99 | 150 | 58 | 1 | 0 | 0 | 0 | 0 | 0 | 365 |
| 0 | 0 | 18 | 0 | 0 | 0 | 12.2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 365 |
| 2 | 0 | 18 | 2 | 13 | 2 | 16 | 3 | 0 | 0 | 0 | 0 | 2 | 2 | 36 a |
| 5 | 0 | 29 | 0 | 170 | （） | 169 | 0 | $\%$ | 0 | 0 | （） | 53 | 0 | 368 |
| 0 | 0 | 25 | 8 | 89 | 35 | 209 | 64 | 0 | 2 | 33 | \％ | 0 | 0 | 369 |
| 8 | 0 | 11 | 0 | 0 | 0 | 142 | 0 | 0 | 0 | 0 | 0 | 44 | 0 | 370 |
| 0 | 0 | 13 | 3 | 93 | $3)$ | 124 | $\%$ | 2 | 2 | 0 | 0 | 0 | 0 | 371 |
| 0 | 0 | 9 | 5 | 46 | $4{ }^{\prime \prime}$ | 25 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| （） | 0 | 6 | 3 | 34 | $\stackrel{2}{0}$ | 38 | 12 | （） | 1 | 0 | 0 | 0 | 0 | 373 |
| 0 | 0 | 6 | 6 | 51 | 32 | $1 \% 2$ | 65 | 0 | 0 | 0 | 0 | （） | 0 | 3 t |
| 0 | 0 | 49 | 0 | 0 | 0 | 1，38＊ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 375 |
| 0 | 0 | 11 | 0 | 100 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 376 |
| 170 | 0 | 260 | 0 | 0 | 0 | 661 | 307 | $12 \%$ | 4. | 3 | 0 | 1，539 | 4 | 377 |
| ${ }_{0}$ | 0 | 20 | 0 | 56 | 0 | 124 | 0 | 0 | 0 | 0 | 0 | 1， 0 | 0 | 378 |
| 3 | 0 | 14 | 0 | 48 | 19 | 55 | 14 | 0 | 0 | 0 | 0 | 18 | 0 | 379 |
| 0 | 0 | 40 | 0 | 0 | 0 | 398 | 0 | 9 | 0 | 8 | 0 | 0 | 0 | 380 |
| 0 | 0 | 35 | 3 | 4； | 0 | 273 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 381 |
| 0 | 0 | 16 | 8 | 0 | 0 | 95 | 113 | 0 | 0 | 0 | 0 | 0 | 0 | －382 |
| 5 | 0 | 17 | 0 | 30 | 0 | 126 | 0 | 0 | 0 | 0 | 0 | 2） | 0 | 383 |
| 0 | 0 | 6 | 2 | $3{ }^{3}$ | 68 | 23 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 384 |
| 0 | 0 | 16 | （） | 72 | 0 | 269 | $\bigcirc$ | 0 | 0 | 0 | 0 | 0 | 0 | 385 |
| 0 | 0 | 11 | 4 | 111 | $8 \stackrel{ }{9}$ | 47 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | $3 \times 6$ |
| 0 | 0 | $\%$ | 2 | 0 | 0 | 631 | 159 | 26 | 22 | 28 | 9 | 0 | 0 | 357 |
| 0 | 0 | \％ | 0 | 0 | 0 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 388 |
| 0 | 0 | 5 | 0 | 8 | 3 | 45 | $1 t$ | 0 | 0 | 0 | 0 | 0 | 0 | 389 |
| 1 | 0 | 5 | 6 |  | 58 | 10 | 6 | 0 | 0 | 0 | 0 | 21 | 0 | 390 |
|  |  | 14 | 0 | 0 | 0 | 159 | 21 | 7 | 0 | 0 | 0 | 28 | 0 | 891 |
|  | 0 | 11 | 0 | 20 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 39\％ |
| 0 | 0 | 15 | 0 | 25 | 0 | 149 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 393 |
| 0 | 0 | 8 | 0 | 37 | 0 | 111. | 15 | 1 | 0 | 10 | 0 | 0 | 0 | 39.1 |
| 0 | 0 | 11 | 18 | 340 | 338 | 20 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 395 |
| 0 | 0 | 10 | 0 | 45 | 0 | 137 | 6 | 0 | 0 | 0 | 0 | 0 | （） | 396 |
| 0 | 0 | 5 | 3 | 40 | 31 | 6 | 2 | 0 | ． 0 | 0 | 0 | 0 | 0 | $39 \%$ |
| 0 | 0 | 10 | 1 | 113 | $6{ }^{\circ}$ | $3 \pm$ | 15 | C | 0 | 0 | 0 | 0 | 0 | 348 |

Table 29．－Statistics of universities and

|  | Location． | Name． | $\begin{gathered} \text { Year } \\ \text { of } \\ \text { first } \\ \text { open- } \\ \text { ing. } \end{gathered}$ | Religious or nonsecta－ rian con－ trol． | Professors and instructors． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Prepar－ atory depart－ ment． |  | Collegi－ ate de－ part－ ment． |  |
|  |  |  |  |  | 告 |  | 号 | 岂 |
|  | \＃ | 2 | 8 | 4 | 5 | 6 | g | 8 |
|  | SOUTH DAKOTA－ continued． |  |  |  |  |  |  |  |
| 399 | Redfield．． | Redfield College ．．．．．．．．．．．－－．－．．．．．．．． | 1887 | Cong ．－．－．．． | 5 | 2 | 6 |  |
| 400 | Vermilion ．－．．．．－．．．． | University of South Dakota．．－－－． | 188： | State．－．．．－ | 16 | 8 | 14 | 4 |
| 401 | Yankton | Yankton College ．－－－－－－－－－ | 188\％ | Cong ．－－－－． | 6 | 7 | 6 | 7 |
|  | TENNESSEE． |  |  |  |  |  |  |  |
| 402 | Athens | U．S．Grant University | 1867 | M．E．－．．．．－－ | 2 | 6 | 4 | 1 |
| 403 | Bristol ．．．．．．．．．－－－－ |  | 1869 | Presb－－－－－ | 5 | 0 | 5 | 0 |
| 404 | Clarksville ．－．．．．－－ | Southwestern Presbyterian Uni－ versity． | 1855 | Presb ．．．－－－ | 0 | 0 | 9 | 0 |
| 40.5 | Harriman－－．．．． | American University of Harriman | 1893 | Nonsect－－－ | 1 | 2 | 18 | 5 |
| 406 | Hiwassee College | Hiwassee Coilege．－．．．．．．．．．．．．．． | 1819 | Nonsect－．－ | 0 | 0 | 3 | 1 |
| 408 | Jackson | Southwestern Baptist Unversity－ | 1817 185 | Bapt Presb－－－ | 1 | 1 | 6 5 | 0 |
| 403 | －－do． | University of Tennessee | 1894 | State ．－．．－－ | 0 | 0 | 29 | 4 |
| 410 | Lebanon | Cumberland University | 1842 | Cum．Presb | 2 | 0 | 5 | 0 |
| 411 | McKenzie | Bethel College－－．． | 18.50 | Cum．Presh | 3 | 3 | 3 | 2 |
| 412 | Maryville | Maryrille College | 1819 | Presb | 4 | 4 | 7 | 3 |
| 413 | Memphis | Christian Brothers College | 1871 | R．C． | 11 | 0 | 12 | 0 |
| 414 | Milligan ． | Milligan College．．．－．－－－． | 188：3 | Christian ．－ | 4 | 2 | 4 | 2 |
| 415 | Mossycreek | Carson and Nerman College | 1851 | Bapt． | 8 | 0 | 7 | 1 |
| 416 | Nashville ． | Central Tonnessee College $a_{\text {－}}$ | 1806 | M．E． | 1 | 3 | 5 | 3 |
| 417 | －．．．do | Fisk Univer＇sity ．－－－－．．．．． | 1866 | Cong | 5 | 7 | 7 | 4 |
| 418 | －do | Roger Williams University | 1863 | Bapt ．－．－ | 4 | 5 | 5 | 3 |
| 419 | ．．do | University of Nashville．－． | 1785 | Nonsect． | 0 | 11 | 15 | 11 |
| 420 | －－．－．do | Vanderbilt University | 1875 | M．E．So． | 0 | 0 | 39 | 0 |
| $4: 1$ | Sewanee | University of the South | 1868 | P．E | 6 | 0 | 16 | 0 |
| 482 | Spencer | Burritt College ．．．．．．－ | 1815 | Christian | 1 | 2 | 3 | 4 |
| $4 \% 3$ | Sweetwater | Sweetwater College＊ | 1874 | Nonsect | 1 | 1 | 2 | 6 |
| 42. | Tusculum | Greeneville and T＇usculum College | 1794 | Presb | 2 | 3 | 4 | 1 |
| 425 | Washington Col－ lege． | Washington College．．．．．．．．．．．．－．．．． | 1795 | Presb．．．．．． | 2 | i | 4 | 2 |
|  | TEXAS． |  |  |  |  |  |  |  |
| 483 | Austin | St．Edward＇s College | 1881 | R．C．．．．．．．． | 16 | 0 | 7 | 0 |
| 427 |  | University of Texas | 1883 | State．．．．．．． | 0 | 0 | 36 | 10 |
| 428 | Brownwood | Howard Payne College | 1599 | Bapt．． | 0 | 2 | 3 | 0 |
| 429 | Campbell－－－－－－－－－ | Henry College－－．．．．．．．．．－－－－－－－－－－． | 1893 | Nonsec | 2 | 1 | 9 | 3 |
| 430 | Fort Wort | Fort Vorth University | 1881 | M．E $\ldots$ ．．．．－ | 4 | 3 | 5 | 3 |
| 431 | ．．．．do | Polytechnic College： | 1891 | M．E．So．．．－ | 6 | 2 | 5 | 0 |
| 43： | Galveston | St．Mary｀s University－．．． | 185 | R．C．－－－．－－ | $\stackrel{\sim}{2}$ | 0 | 6 | 0 |
| 483 | Georgetown | Southwestern University | $18 \%$ | M．E．So ．．．－ | 3 | 2 | 9 | 7 |
| 434 | Greenville－－－－－－－－ |  | 1893 | Bapt ．－．－－－－ | 1 | 1 | 5 | 2 |
| 43.5 | Hermoson | Add Ran Christian University | 1873 | Christian－－ | 1 | 1 | 10 | 3 |
| 435 | Marshall | Wiley University ．－．．．．．．－．．．．．．．．．．．． | 1873 | M．E－－－－－－－ | 4 | 2 | 4 | 2 |
| 437 | Sain Antonio－－－－－－ | St．Louis College． | 1894 | R．C－－－．．．． | 10 | 0 | 5 | 0 |
| 438 | Sherman．．． | Austin College ．．．． | 1850 | Presb | 1 | 0 | 5 | 0 |
| 439 | Tehuacana | Trinity University | 1869 | Cum．Presb | 6 | 0 | ${ }_{6}^{6}$ | 0 |
| 440 | Waco ．－－－－－－－－－－－－ | Baylor University－－－－－－－－－．－．．．．．．．．．．．．． | 1845 | Bapt | 1 | 2 | 12 | 4 |
| 441 | －－－－－do | Paul Quinn College | 1881 | A．M．E．－．．． | $\because$ | 3 | 3 | 2 |
|  | UTAH． |  |  |  |  |  |  |  |
| 44.2 | Logan ．－． | Brigham Young College． | 1878 | L．D．S．－．．．． | 18 | 2 | 10 | 0 |
| 443 | Salt Lake City | Salt Lake College－－．．．． | 1895 | Cong－．－．－．－ | 2 | 4 | 2 | 4 |
| 444 | ．．．．do ．－－－．－． | Sheldon Jackson College＊ | 1897 | Presb－－－．．． | 1 | 4 | $\underset{18}{2}$ | 0 |
| 445 | －do | University of Utah ．－．．．． | 1850 | State．．．．．．． | 18 | 1 | 18 | 1 |
|  | VERMONT． |  |  |  |  |  |  |  |
| 446 | Burlington | University of Vermont． | 1800 | State．．．．．．．－ | 0 | 0 | 24 | 0 |
| 447 | Middlebury | Middlebury College．．．．．．．．．．．．．－．－－－－ | 1800 | Nonsect．．．． | 0 | 0 | 11 | 0 |
| 448 | Northfield． | Norwich University | 1834 | Nonsect．．．． | 0 | 0 | 9 | 0 |

colleges for men and for both sexes－Continued．

| Professors and instruct－ ors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de－ partments． |  | Total num－ ber（exclud－ ing dupli－ cates）． |  | Prepara－ tory de－ partment． |  | Collegiate department． |  | Graduate department． |  |  |  | Professional depart－ ments． |  |  |
|  |  | Resident． | Nonresident． |  |  |  |  |  |  |
| $\underset{y y y y}{\text { © }}$ | $\begin{aligned} & \text { में } \\ & \text { ह्व } \\ & \text { है } \end{aligned}$ |  |  | $\underset{\text { Bi }}{\underset{y y y}{\mid c}}$ | A | 号 | $\begin{aligned} & \text { घं } \\ & \text { d } \\ & \text { 合 } \end{aligned}$ | $\underset{\text { gi }}{\stackrel{y}{c}}$ | $\begin{aligned} & \text { gं } \\ & \text { 合 } \\ & \text { है } \end{aligned}$ | á | $\begin{aligned} & \text { घं } \\ & \text { 品 } \\ & \text { B } \end{aligned}$ | $\begin{aligned} & \text { A } \\ & \text { 品 } \end{aligned}$ | $\begin{aligned} & \text { ä } \\ & \text { घू } \\ & \text { B } \end{aligned}$ | 号 |  |  |
| $\bigcirc$ | ［13） | 良 | 88 |  |  | 183 | 18 | 1.5 | 16 | 18 | ＋8 | $1{ }^{18}$ | 1210 | 3且 | －188 |  |
| 0 | 0 | 8 | 3 | 27 | 19 | 14 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 399 |
| 0 | 0 | 19 | 9 | 103 | 112 | 48 | 44 | 3 | 3 | 0 | 1 | 0 | 0 | 400 |
| 0 | 0 | 6 | 7 | 58 | 56 | 31 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 401 |
| 49 | 0 | 58 | 7 | 87 | 97 | 14 | 7 | 0 | 1 | 1 | 0 | 259 | 0 | $40 \%$ |
| 0 | 0 | 5 | 0 | 20 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 403 |
| 6 | 0 | 12 | 0 | 0 | 0 | 93 | 0 | 1 | 0 | 0 | 0 | 28 | 0 | 404 |
| － 5 | 1 | 23 | 8 | 61 | 29 | 43 | 19 | 2 | 0 | 44 | － 2 | 30 | 0 | 405 |
| － 0 | 0 | 3 | 1 | 0 | 0 | 59 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 406 |
| 9 | 0 | 17 | 2 | 10 | 5 | 132 | 52 | 0 | 0 | 0 | 0 | 50 | 0 | 407 |
| 8 | 0 | 15 | 9 | 137 | 143 | 5 | 7 | 0 | 0 | 0 | 0 | 12 | 0 | 408 |
| 53 | 0 | 71 | 4 | 0 | 0 | 269 | 90 | 5 | 5 | 0 | 0 | 390 | 0 | 409 |
| 9 | 0 | 15 | 0 | 47 | 9 | 48 | 2 | 6 | 0 | 0 | 0 | 123 | 4 | 410 |
| 0 | 0 | 3 | 3 | 30 | 31 | 20 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 411 |
| 0 | 0 | 12 | 4 | 175 | 134 | 73 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 41\％ |
| （） | 0 | 13 | 0 | 150 | 0 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 413 |
| 0 | 0 | 4 | 2 | 65 | 48 | 60 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 414 |
| 0 | 0 | 8 | 1 | 150 | 75 | 50 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 415 |
| 17 | 0 | 23 | 5 | 26 | 7 | 17 | 10 | 0 | 0 | 0 | 0 | 256 | 8 | 416 |
| 3 | 0 | 9 | 9 | 74 | 14 | 50 | 9 | 0 | 0 | 0 | 0 | 4 － | 3 | 417 |
| 3 | 0 | 5 | 8 | 83 | 77 | 24 | 2 | 0 | 0 | 0 | 0 | 16 | 0 | 418 |
| 24 | 0 | 46 | 32 | 162 | 184 | 205 | 398 | 1 | 2 | 0 | 0 | 191 | 3 | 419 |
| 76 | 0 | 100 | 0 | 0 | 0 | 163 | 34 | 24 | 4 | 0 | 0 | 586 | 3 | 400 |
| 42 | 0 | 53 | 0 | 144 | 0 | 114 | 0 | 8 | 0 | 0 | 0 | 204 | 0 | 421 |
| 0 | 0 | 4 | 6 | 98 | 46 | 54 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 42\％ |
| 0 | 0 | 3 | 6 | 4 | 11 | 51 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 423 |
| 0 | 0 | 6 | 4 | 75 | 47 | 21 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 424 |
| 0 | 0 | 6 | 3 | 47 | 21 | 16 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 425 |
| 0 | 0 | 17 | 0 | 127 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 426 |
| 25 | 1 | 60 | 11 | 0 | 0 | 359 | 167 | 18 | 17 | 0 | 0 | 360 | 31 | 427 |
| 0 | 0 | 6 | 5 | 37 | 30 | 39 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 428 |
| 0 | 0 | 9 | 3 | 82 | 27 | 60 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 489 |
| 20 | 0 | 29 | 13 | 116 | 72 | 13 | 12 | 3 | 1 | 0 | 0 | 137 | 4 | 430 |
| 0 | 0 | 7 | 7 | 160 | 80 | 50 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 431 |
| 0 | 0 | 8 | 0 | 40 | 0 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $43 \%$ |
| 0 | （） | 12 | 9 | 96 | 31 | 174 | 87 | 2 | 0 | 0 | 0 | 0 | 0 | 4.33 |
| 0 | 0 | 6 | 3 | 32 | 16 | 41 | 36 | 0 | 2 | 0 | 0 | 0 | 0 | 431 |
| 2 | 0 | 11 | 4 | 23 | 10 | 88 | 40 | 0 | 0 | 0 | 0 | 10 | 0 | 435 |
| 0 | 0 | 4 | 2 | 34 | 2 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 436 |
| 0 | 0 | 15 | 0 | 108 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 437 |
| 0 | 0 | 6 | 0 | 20 | 0 | 7\％ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 438 |
| 0 | 0 | 7 | 2 | 41 | 16 | 45 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 439 |
| 18 | 2 | 28 | 8 | 200 | 150 | 100 | 50 | 1 | 0 | 7 | 3 | 180 | 58 | 440 |
|  |  | 7 | 3 | 53 | 47 | 23 | 18 | 0 | 0 | 0 | 0 | 21 | 0 | 441 |
|  | 0 | 21 | 2 | 243 | 349 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 42 |
| 0 | 0 | 2 | 4 | 15 | 27 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 443 |
| 0 | 0 | 3 | 4 | 35 | 41 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 444 |
| 0 | 0 | 26 | 2 | 117 | 36 | 42 | 39 | 2 | 3 | 0 | 0 | 0 | 0 | 445 |
| 29 | 0 | 63 | 0 | 0 | 0 | 230 | 48 | 4 | 1 | 0 | 0 | 191 | 0 | 446 |
| 0 | 0 | 11 | 0 | 0 | 0 | 67 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 447 |
| 0 | 0 | 9 | 0 | 0 | 0 | \％9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 448 |

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Table 29.-Statistics of universities and


* Statistics of 1898-99.
colleges for men and for both sexes－Continued．

| Professors and instruct－ ors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de－ partments． |  | Total num－ ber（exclud－ ing dupli－ cates）． |  | Prepara－ tory de－ partment． |  | Collegiate department． |  | Graduate department． |  |  |  | Professional depart－ ments． |  |  |
|  |  | Res | ent． |  |  | Nonr | dent． |  |  |  |
|  |  |  |  | 豙 | $\begin{aligned} & \text { घं } \\ & \text { g } \\ & 0 \\ & k \end{aligned}$ |  |  | 合 | हैं हैं ह | ¢ | 等 | $\stackrel{\text { ี }}{\stackrel{\text { ® }}{4}}$ | 钽 | 号 | घं 日 相 3 | 寻 | $\begin{aligned} & \text { घं } \\ & \text { घ } \\ & \text { e } \\ & \end{aligned}$ |  |
| 9 | 19 | 且县 | 1 12 | 1：3 | 18 | 15 | 16 | 188 | 18 | 19 | 180 | $\mathfrak{B}^{\text {\％}}$ |  |  |
| 0 | 0 | 11 | 0 | 0 | 0 | 131 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 449 |
| 0 | 0 | \％ | 3 | 68 | 58 | 13 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 450 |
| 32 | 0 | 50 | 0 | 0 | 0 | 265 | 0 | 32 | 0 | 0 | 0 | 358 | 0 | 4.51 |
| 0 | 0 | \％ | 0 | 14 | 0 | 105 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4）\％ |
| 0 | 0 | 5 | 3 | 41 | 39 | 13 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 453 |
| 0 | 0 | 9 | 0 | 7 | 0 | 116 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 454 |
| 8 | 0 | 26 | 0 | 0 | 0 | 131 | 0 | 2 | 0 | 0 | 0 | 58 | 0 | 450 |
| 3 | 0 | 17 | 0 | 0 | 0 | 183 | 7 | 0 | 0 | 0 | 0 | 46 | 0 | 456 |
| 5 | 0 | 11 | 2 | 130 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 457 |
| 0 | 0 | 11 | 0 | 24 | 0 | 110 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 458 |
| 0 | 0 | 11 | 1 | 18 | 13 | 164 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 459 |
| 0 | 0 | 8 | 5 | 53 | 18 | 13 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 460 |
| 4 | 0 | $3:$ | 2 | 65 | 50 | 199 | 130 | 14 | 5 | $\pm$ | 2 | 39 | 5 | 461 |
| 4 | 0 | 18 | 0 | 89 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 462 |
| 0 | 0 | 5 | 2 | 47 | 36 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 463 |
| 0 | 0 | 3 | 1 | 7 | 9 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | $46 \pm$ |
| 0 | 0 | ${ }^{6}$ | 0 | 70 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 465 |
| 0 | 0 | 11 | 3 | $5 \%$ | 60 | 27 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 466 |
| 1 | 0 | 3 | 3 | 22 | 15 | 20 | 21 | 0 | 0 | 0 | 0 | 5 | 0 | $46 \%$ |
| 0 | 0 | 9 | 3 | 13 | 5 | 16 | 8 | 4 | 0 | 0 | 0 | 24 | 3 | 468 |
|  |  | $4{ }^{3}$ |  | 208 | 34 | $1 \% 7$ | 106 | 31 | 7 | 0 | 0 | 1\％ | 2 | 469 |
| 0 | 0 | 18 | 5 | 80 | 66 | \％3 | 5 | \％ | 4. | 2 | 0 | 0 | 0 | $4 \% 0$ |
| 0 | 0 | 26 | 2 | 173 | 0 | 156 | 70 | 1 | 1 | 0 | 0 | 0 | 0 | $4 \% 1$ |
| 4 | 0 | 18 | 0 | 17 | 3 | 43 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | $4 \% 2$ |
| 0 | 0 | 17 | 6 | 20 | 15 | 30 | 20 | 0 | 0 | 30 | 0 | 0 | 0 | 473 |
| 44 | 0 | 142 | 19 | 0 | 0 | 1，410 | 390 | 72 | 21 | 0 | 1 | $27 \%$ | 5 | $4 \pi 4$ |
| 0 | 0 | 8 | 3 | 49 | 77 | 1， 23 | 14 | 2 | 1 | 0 | 0 | 0 | 0 | $4 \%$ |
| 0 | 0 | 7 | 0 | $5 \pm$ | 0 | 131 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 416 |
| 0 | 0 | 18 | 0 | 190 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $4 \%$ |
| 0 | 0 | 9 | 7 | 35 | 31 | 29 | 20 | 0 | 1 | 0 | 1 | 0 | 0 | 478 |
| 0 | 0 | 9 | 0 | 85 | 12 | 55 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | $4 \%$ |
| 0 | 0 | 13 | 3 | 68 | 47 | 33 | 35 | 3 | 1 | 1 | 0 | 0 | 0 | 480 |

Table 30.-Síctistics of universities and

*Statistics of 1898-99.
$a$ Free to residents; $\$ 40$ to nonresidents.
$b$ Free to residents; $\$ 39$ to nonresidents.
$c$ Including tuition.
$d$ Free to residents; $\$ 60$ to nonresidents.
colleges for men and for both sexes-Continued.

| Value of scientific apparatus. | Value of grounds and buildings. | Productive funds. | Income. |  |  |  |  |  | Benefactions. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | From tuition and other fees. | From productive funds. | Flom State or municipal appro-priations. | From <br> United <br> States <br> Gov- <br> ern- <br> ment <br> appro-priations. | From other sources. | Total. |  |  |
| 11 | 1'8 | 13 | $1{ }^{1}$ | 18 | 16 | 17 | 18 | 19 | (2) |  |
|  | 880,000 | 0 | \$12,000 | 0 | 0 | 0 | 0 | 812,000 | 0 | 1 |
| \$10,000 | 100, 000 | \$50, 000 | 4,000 | \$3, 000 | - 0 | 0 | 83,000 | 10,000 | \$6,000 | 2 |
|  | 4,000 | 0 | 1,500 | 0 | 8400 | 0 | 0 | 1,900 | 8,000 | 3 |
| 1,0c0 | 10,000 | 0 | 2,000 | 0 | 1,500 | 0 | 0 | 3, 500 |  | 4 |
| - 500 | 3, 500 | 0 | 1,800 | 0 | 350 | 0 | 0 | 2,150 |  | 5 |
| 15,000 | 80,000 | 0 | 17,000 | 0 | 0 | 0 | 1,000 | 18,000 |  | 6 |
| 500 | 30,000 | 0 |  |  |  |  |  |  |  | 7 |
| 40,000 | 500,000 |  |  |  |  |  |  |  |  | 8 |
| 50,000 | 300,000 | 300,000 | 3,560 | 24, 000 | 10,000 | 0 | 7,560 | 45,000 | 2,500 | 9 |
| 41, 717 | 102, 600 | 0 |  | 0 | 10,000 | 840,000 | 2,295 | 52, 293 |  | 10 |
| 2,500 | 40, 000 |  |  |  |  |  |  |  |  | 11 |
| 13,000 | 80,000 | 0 | 17,000 | 0 | 0 | 0 | 0 | 17,000 | 3,000 | 12 |
| 1,000 | 25,000 | 0 1500 |  |  |  |  |  |  | 1,000 | 13 |
| $\frac{1}{4,060}$ | 50,000 60,000 | 15,000 20,00 | 2,600 3,500 | 1,500 300 | 0 | 0 | 0 1,200 | 3,500 | 1500 | 14 |
| 49,71\% | 233, 500 | 130,000 | 3,500 | 10,400 | 33, 230 | 33, 18. | 1,200 | 5,000 80,855 | 15,060 | 15 |
| 800 | 3:3, 300 | 0 | 1,873 | - 0 | - 0 | 33, 0 | 2,427 | 4,300 | $48^{-}$ | 17 |
| ..... .-... | 10,600 | 0 | 1,200 | 0 | 0 | 0 | 0 | 1,200 |  | 18 |
| 3\%5, 000 | 1,792,304 | 2, 828, 234 | 0 | 176,802 | 236,298 | 40,000 | 10,461 | 463, 361 | 10,000 | 19 |
| 9,800 | 92, 850 | 113, 000 | 7,983 | 6,306 | 0 | 0 | 216 | 14, 515 | 33, 066 | 20 |
| 4,000 | 209,000 | 30,000 | 20,000 | 900 | 0 | 0 | 100 | 21,000 |  | 21 |
| 600 | 18,000 | 2,000 | 1,600 | 0 | 0 | 0 | 0 | 1,600 | 5,500 | 22 |
| 800 | 49,700 |  |  |  |  |  |  |  | 0 | 23 |
| 4,000 | 70,000 | 1:9,500 | 6,612 | 1,260 | 0 | 0 | 0 | 7,872 |  | 24 |
| 4,000 | 35, 000 | 35, 000 | 1,500 | 2,100 | 0 | 0 | 500 | 4,100 | 7,200 | 25 |
| 20,800 | 70,000 | 28,200 | 18,657 | 1,063 | 0 | 0 | 1,552 | 21,2\% | 834 | 26 |
| 117,000 | 800, 000 | 0 | 4,708 | 0 | 0 | 0 | - 0 | 4,708 |  | 27 |
| 75, 000 | 65,000 | 0 | 23,000 | 0 | 0 | 0 | 0 | 23,000 |  | 28 |
| 1,000 | 30,000 | 10,000 | 1,000 | 1,004 | 0 | 0 | 1,575 | 3,579 |  | 29 |
| 250,600 | $2,000,000$ | 18,000, 100 | 31,000 | 200,000 | 0 | 0 | 1, 0 | 231,000 |  | 30 |
| 39, 49, | 230, 300 | 44,000 | 5,000 | 2, 640 | 72, 000 | 0 | 11, 0 | 79,640 | 5,000 | 31 |
| 24,000 26,500 | 698,000 150,000 | 36\%, 000 | 12,000 | 22, 000 | 0 | 0 | 11,000 | 45, 060 | 203,000 | 32 |
| 35, 000 | 427, 000 | 214, 000 | 18,087 | 12,282 | 0 | 0 | 0 | 30,369 | 25, 020 | 34 |
| 15,000 | 1,200,000 | 758,344 | 15,229 | 34, 299 | 0 | 0 | 1,861 | 51, 389 | 40,958 | 35 |
| 152, 935 | 531, 300 | 1,370,839 | 32,205 | 58,381 | 0 | 0 | 0 | 90,586 | 100,000 | 36 |
|  |  | 4, 942, 166 | 487,029 | 255,968 | 0 | 0 | 26,608 | 769,598 | 641, 234 | 37 |
| 9,000 | 12,800 | 0 | 0 | 0 | 0 | 4,800 | 1,806 | 6, 606 |  | 38 |
| 40, 0c0 | 82,700 | 83,000 | 1,592 | 4,980 | 0 | 35,600 | 1,250 | 42, 822 |  | 39 |

Table 30.-Statistics of universities and colleges

$a$ Including taition.
${ }^{\circ}$ Free to residents; $\$ 50$ to nonresidents.
for men and for both sexes-Continued.


Table 30.-Statistics of universities and colleges


[^110]for men and for both sexes-Continued.


Table 30.-Statistics of universities and colleges

for men and for both sexes-Continued.


Table 30.-Statistics of miversities and colleges

|  | Name. | Expenses in collegiate department. |  | Annual living expenses. |  |  |  | Library. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Vol- } \\ & \text { umes. } \end{aligned}$ | $\begin{aligned} & \text { Pam- } \\ & \text { phlets. } \end{aligned}$ | Value. |
|  | 1 | : | 3 | 4 | 5 | 4 | \% | 8 | 9 | 10 |
| 194 | MASSACHUSETTS-continued. <br> Harvard University | $\begin{array}{r} 1150 \\ 50 \\ 100 \\ 105 \end{array}$ | $\begin{aligned} & 08 \\ & \$ 8 \\ & 10 \\ & 10 \end{aligned}$ | \$200 | $\begin{gathered} \$ 350 \\ 74 \\ 250 \\ 300 \\ 300 \\ 300 \\ 307 \end{gathered}$ | ¢6 | 284 | $\begin{array}{r} 58.511 \\ 3450 \\ 34.0010 \end{array}$ | 127, 822 | $\begin{array}{r} -\cdots, 0,0 \\ 16,500 \\ \hline 1000 \end{array}$ |
| 195 | French-Anerican College |  |  | 15 |  | ${ }_{0}^{2}$ | $\begin{aligned} & 70 \\ & 90 \\ & 90 \end{aligned}$ |  | $\begin{aligned} & 39,000 \\ & 10,000 \\ & \hline \end{aligned}$ |  |
| 197 198 103 | Williams College |  |  |  |  |  |  | 4, 4,50 |  |  |
| 199 | Colark University | 60 | 10 | 257 |  | 0 | - | $\begin{aligned} & 4,2,000 \\ & 18,000 \\ & 13,000 \end{aligned}$ | 2,090 | 20,000 |
|  | michigan. |  | 10 |  |  |  |  |  |  |  |
| 200 | Adrian College | 5 | 10240 | 126 | 126 | 0 | 10 | $\xrightarrow{6,000}$ | ${ }_{5}^{500}$ | 4,00021,0001,000 |
| 201 | Albion College |  |  | 114 |  | 0 | ${ }_{4}^{4}$ | 13,000 | 5, 1200 |  |
| 203 | University of Mich | (a) ${ }_{40}^{32}$ | 0 |  | 190 | 5 |  | 140,000 | 20,600 | $\begin{array}{r}280,000 \\ 10,000 \\ \hline\end{array}$ |
| 204 | Detroit College.. |  | 10 | $\begin{array}{r} 88 \\ 1700 \\ 1100 \\ 100 \end{array}$ |  |  | 13 |  |  |  |
| 20.5 | Hillsdale College | 401018302323 | 21 |  | $\begin{aligned} & 150 \\ & 160 \\ & 200 \\ & 2000 \\ & 200 \end{aligned}$ |  |  |  | $\stackrel{3,803}{ }$ | 11, 95\% |
| ${ }_{207}^{2068}$ | Hope College --...... |  |  |  |  | - |  | ( $\begin{aligned} & \text { 6, } 244 \\ & 26,500\end{aligned}$ | 3,817 | 4, 200 |
| 208 | Olivet College .... |  | 23 |  |  |  |  |  |  |  |
|  | minnesota. | 23 |  |  |  |  |  |  |  |  |
| 209 | St. John's University- | 50 | 10 | 150 | 85 | 0 | 0 | 16,000 | 10,050 | 33,10001,500750,1000 |
| 211 | Augsburg Seminary -ata | 15 |  | 125 | 175 |  |  | 60, ${ }^{600}$ |  |  |
| 212 | Carleton Collego -....... | $3 \pm$ | 10 |  |  |  |  |  |  | $\begin{array}{r} 15,000 \\ 3,67 \\ 7,000 \end{array}$ |
| 213 | St. Olaf College - | 0 |  | 120 | 130 |  |  | 2, 700 | 1,160 |  |
| 215 | Macalester College. | 30 | 15 | 150 | 300 |  |  | \%, |  |  |
| 216 | Gustavus Adolphus Coliege | 3210 | 510 | ${ }^{125}$ | 120 |  |  | 7,500 | 2,000 | -2,500 |
| 217 | Parker College |  |  |  |  | 0 |  |  |  |  |
|  | mississi |  |  |  |  |  |  |  |  |  |
| 218 | Mississippri College | $\begin{aligned} & 35 \\ & 14 \\ & 10 \end{aligned}$ | 16510 | $\begin{gathered} 60 \\ 48 \\ 60 \\ 130 \end{gathered}$ | 103 | 0 | 1 | 3,000 | 1,00 | 3,0005,5006,50025,000 |
| 229 | Rust Unversity. |  |  |  | 120 |  | 4 | 5 5,000 |  |  |
| 291 | University of Mississippi. |  |  |  | 160 | 1 | 5 | 17,000 | $\stackrel{2}{2,000}$ |  |
|  | missouri. |  |  |  |  |  |  |  |  |  |
| 22.2 | Contral Christian College - | 404030408040 | 5 | 90 | 100 | 0 | 5 | 1, | -25 | 2008098,2002,000 |
| 224 | Southwest Baptist College........ |  | 4 | ${ }_{90}^{72}$ | $\begin{array}{r}93 \\ 108 \\ \hline\end{array}$ | 0 | 0 | 1,060 | 150 0 |  |
| 225 | Missouri Wesleyan College. |  |  | 76 | 133 |  |  | 1,500 | 500 |  |
| , | Christian University - |  |  | 120 | 140 |  |  | 2,000 |  |  |
| 22\% | St. Vincent College |  |  | 175 | 100 |  |  | 12,000 | 0 | 1,200 |
| 229 | University of the State of Mis- | 40 | 5 | 12 |  | -12 | 6 | 36, 400 |  | 1,200 |
|  | souri. | 31 |  | \% | 100 |  |  |  |  |  |
| 230 | Grand River Christian Union |  | -.. |  |  |  |  | 803 | 09 | 1,000 |
| 231 | Central College | 505046 | 15 | 100 | 120 |  | 7 | $\begin{aligned} & 6,000 \\ & 6,000 \end{aligned}$ | 1,000600 | 12,0006,500 |
| ${ }_{33}^{233}$ | Westminster College. |  |  |  |  | 0 |  |  |  |  |
| 234 | Pritchett College...... | 404040 | a- | 140 | - 57 |  |  |  | 3,000 | 1,10020,00016,500 |
| 233 | William Je well Coliege - |  | 10 | 90 |  | ${ }_{0}^{0}$ | 19 | 12,000 |  |  |
| ${ }_{23}^{236}$ | Missouri Valley College.. | 3845 | 9 | 81 | 108 |  |  | 5,509 | ---.-- |  |
| 238 | Morrisville College**--- |  | 10 |  |  |  |  |  | 20050 |  |
| 239 | Scarrit Collegiate nostit | 4038 | ${ }_{0}^{2}$ |  | 90 | 0 | 0 | 2,000 |  | 2,60012,00012,00 |
| 239 | Odessa College |  |  | 60 | 120 | 0 | 0 |  |  |  |
| 241 | Christian Brothers College. | $\begin{gathered} 50 \\ 60 \\ 60 \end{gathered}$ | -. | 230 | 300 | $\begin{gathered} 0 \\ 0 \\ 0 \\ 0 \end{gathered}$ | $\begin{array}{r}\text { 4 } \\ 0 \\ 0 \\ 19 \\ 19 \\ -1 \\ \hline\end{array}$ | 20,000 | 2,00010,00010 | 12,600200,6005,000150000 |
| 242 | St. Louis University .... |  |  |  |  |  |  | 40,000 |  |  |
| 243 | Washington University | $\begin{gathered} 150 \\ 48 \\ 40 \\ 30 \end{gathered}$ | 4 <br>  | -700 <br> 155 <br> 148 | $\left\lvert\, \begin{array}{r} 300 \\ 175 \\ 200 \end{array}\right.$ |  |  |  |  |  |
| 4 | Drury College |  |  |  |  | $\begin{array}{c\|c} 0 & 1 \\ -\quad . & 1 \\ \hline \end{array}$ |  | $\begin{aligned} & 24,000 \\ & 1,000 \end{aligned}$ | 20,000 <br> 500$\|$ |  |
| 245 | Tarkio College ............ |  |  |  |  |  |  |  |  | 15,0002,500 |
| *Statistics of 1898-99 |  |  |  | $a$ Residents, $\$ 30$; nonresidents, $\$ 40$. |  |  |  |  |  |  |

for men and for both sexes－Continued．

| Value of scientific appa－ ratas． | $\begin{aligned} & \text { Value of } \\ & \text { grounds } \\ & \text { and } \\ & \text { buildings. } \end{aligned}$ | Produc－ tive funds． | Income． |  |  |  |  |  | Benefac－ tions． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | From tuition and other fees． | $\begin{aligned} & \text { From } \\ & \text { produc- } \\ & \text { tive } \\ & \text { funds. } \end{aligned}$ | From State or munic－ ipal appro－ pria－ tions． | From <br> Unitea <br> States Gov－ ern－ ment appro－ pria－ tions． | From other sour－ ces． | Total． |  |  |
| 1 | 198 | 18 | 显 4 | 15 | 16 | 18 | 189 | 19 | 930 |  |
| 81，500，000 | 3i， 500,000 | \＄12，615，032 | §668，66\％ | \＄541， $5 \% 0$ | 0 | 0 | \＄166，435 | S1，3\％ $6,60 \sim$ | 583n̆，10？ | 134 |
| 2，560 | 1，55，000 | 10，000 | 2，100 | － 0 | 0 | 0 | ¢ 0 | $\xrightarrow{2}, 100$ | 31，000 | 19.5 |
| 100，000 | 1，000，000 | 1，800，000 | 45.000 | 66，000 | 0 | 0 | 0 | 105，000 | 110，000 | 196 |
| 46， 300 | 475， 800 | 1，142， 000 | 51，000 | 56， 1000 | 0 | 0 | 7,500 | 114， 500 | 15， 800 | 197 |
|  | 228，146 | 720， 212 | 2，945 | 33， 666 | 0 | 0 | 4，170 | 40.811 |  | 198 |
| 5，000 | 500， 000 | 0 | 19，000 | 0 | 0 | 0 | 5，200 | 24,200 | 5，00U | 199 |
| 1，000 | 100， 000 | 80，000 | 5， 750 | 3，474 | 0 | 0 | 3，220 | 12， 414 |  | 200 |
| 20，000 | 110，000 | 230，000 | 14， 814 | 11，000 | 0 | 0 | 4，900 | 30， 114 | 6， 300 | 201 |
| 5，000 | 60，000 | 220，000 | 4，000 | 12，000 | 0 | 0 | 1，000 | 17．000 | 180，000 | 202 |
| 845， 943 | 1，206， 873 | 546， 256 | 192，425 | 28，653 | S293， 283 | 0 | 40， 109 | 55 $4,7 \%$ | 46，\％00 | 203 |
| $\stackrel{\sim}{2}, 000$ | 155，000 | － 0 | 6， 000 | － 0 | 0 | 0 | 0 | 6， 000 | － 0 | 204 |
| 12，876 | 80，000 | 238，765 | 3， 480 | 11，701 | 0 | 0 | 0 | 15， 181 | 5，009 | $\stackrel{305}{00}$ |
|  | 75， 000 | 219，967 | 2， 433 |  |  |  |  |  | $17,60 \%$ | 205 |
| 1,000 100,000 | 60，000 | 208， 685 | 6，716 | 11，980 | 0 | 0 | 3，110 | 21， 806 |  | 208 |
| 100，000 | 158， 757 | 101，2\％3 | 14,284 | 〕， 640 | 0 | 0 | 418 | 20，312 | 27，880 | 208 |
| 40，000 | 300,000 | 0 | 12， 200 | 0 | 0 | 0 | 0 | 12．200 | 200 | 209 |
|  | 50， 000 | 0 | 3，100 | 0 | 0 | 0 | 0 | 3，109 | 8，000 | 210 |
| 90，000 | 1，670， 000 | 1，368，815 | 97， 645 | 60，830 | 135， 628 | \＄40，000 | 17， 739 | 351， 842 | 0 | 211 |
| 50，000 | 200， 000 | 125， 000 | 16，239 | 6， 713 | 0 | 0 | 3，376 | 26，328 | 37，000 | 21\％ |
| 3，936 | 29，700 | － 0 | 12，11\％ | 0 | 0 | 0 | 9，581 | 21，693 |  | 213 |
| 17，000 | 160，000 | 95， 757 | 11，973 | 6，132 | 0 | 0 | 0 | 18，105 | 4，014 | 214 |
| 3，500 | 200，000 | 8，000 | 4，000 | 500 | 0 | 0 | 3， 000 | 8，000 |  | 215 |
| 10，000 | 75， 000 | 0 | 11，165 | 0 | 0 | 0 | 8，16\％ | 19，33： |  | 216 |
| 1，000 | 50， 000 | 60,000 | 800 | 2， 700 | 0 | 0 | 0 | 3，500 |  | 217 |
| 3，000 | 40，000 | 41，250 | 7，500 | 2，700 | 0 | 0 | 1，090 | 11， 200 | 1，000 | 218 |
| 300 | 125，000 | 0 | 2，500 | 0 | 0 | 0 | 3，725 | 6，225 |  | 219 |
| 2．090 | 70，000 | 110，000 | 3，090 | 6，500 | 0 | 0 | 2，000 | 11，500 |  | 220 |
| \％5， 000 | 300， 000 | \％50，000 | 5,000 | 32，400 | 34， 000 | 0 | 0 | 71，400 | 0 | 221 |
| 125 | 30，000 | 6，000 | 1，200 | 186 | 0 | 0 | 4，500 | 厄̌， 896 | 4，696 | $\underset{\sim}{2} \sim$ |
| 1， 2,500 | 25,000 10,000 | 0 | 4，0，00 | 0 | 0 | 0 | 0 | 4．000 | 0 | $2 \cdot 1$ |
| 500 | 33， 060 | 20，000 | 3，500 | 500 | 0 | 0 | 1，000 | 5， 000 | 20， 000 | $2 \%$ |
|  | 75， 000 | 25，000 | 3，000 | 1， 000 | 0 | 0 | 500 | 4，500 | 10，000 | 226 |
| 2，000 | 60，000 | 0 | 4，000 | 0 | 0 | 0 | 0 | 4，000 |  | 227 |
| \％00 | 15， 000 | 0 | 4，500 | 0 | 0 | 0 | 800 | 5，300 | 10，000 | 228 |
| 150，000 | 900，000 | 1，235， 819 | 11，250 | 69,610 | \％4，4\％9 | $32,5 \% 8$ | 11，665 | 192，582 | 5， 000 | 299 |
|  | $\because 0,000$ | 0 | 2，200 | 0 | 0 | 0 | 0 | 2,500 |  | 230 |
| 15，000 | 330,000 | 130， 000 | 8，000 | 5，000 | 0 | 0 | 300 | 13，300 | 34,800 | 231 |
| 6，000 | 45，000 | 210，000 | 3，522 | 6，749 | 0 | 0 | 0 | 10,267 | 6，056 | 23. |
| 18，000 | 45， 000 | 77，000 | 1， 810 | 5，900 | 0 | 0 | 0 | 7，740 | 2，200 | 933 |
| 1，000 | 30， 000 | 12，000 | 4，200 | 400 | 0 | 0 | 0 | 4，600 |  | 234 |
| 10，000 | 150，000 | 200， 000 | 8，000 | 12， 000 | 0 | 0 | 0 | 20，000 | 13,000 | 235 |
| 5，000 | 130，000 | 113，000 | 8，308 | 8，298 | 0 | 0 | 3，350 | 19，986 |  | 236 |
| 1，200 | 25，000 | 0 | 4，200 | 0 | 0 | 0 | 0 | 4，200 |  | 237 |
|  | 30，000 | 0 | 6，000 | 0 | 0 | 0 | 0 | 6， 000 |  | 238 |
| 150 | 6． 500 | － 0 | 1，400 | 0 | 0 | 0 | 460 | 1，800 | 0 | 239 |
| 11,700 2,400 | 450,000 600,000 | 200， 000 | 26，000 | 0 | 0 | 0 | 0 | 26，00＇） |  | 210 |
| 20，000 | S70，000 | 0 | 15， 000 | 0 | 0 | 0 | 0 | 15， 0109 | 0 | 219 |
| 145，000 | 1，020，000 | 1，000， 000 | 123，5\％0 | 27,400 | 0 | 0 | 9，200 | 160， 170 | 193， 600 | 243 |
| 10， 000 | 150，000 | 250，000 | 7，530 | 13， 500 | 0 | 0 | 95\％ | 22，000 | 2，500 | 211 |
| 5，000 | 80，000 | 45，000 | 7，500 | 2， 500 | 0 | 0 | 1，000 | 11，000 | 3，200 | 245 |

Table 30.-Statistics of universities and colleges

$a$ Including tuition.
for men and for both sexes-Contimued.


[^111]a 46,000 acres of land.

Table 30.-Statistics of miversities and colleges

*Statistics of 1898-99.
$a$ Including tuition.
$b$ Free to residents of Cincinnati; $\$ \pi$ to nonresidents.
for men and for both sexes-Continued.

| Value of scientific apparatus. | Value of grounds and buildings. | Productive funds. | Income. |  |  |  |  |  | Benefactions. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | From tuition and other fees. | From productive funds. | From State or municipal appro-priations. | From <br> United <br> Statos Gov. er'nment appro-priations. | From other sources. | Total. |  |  |
| $1{ }^{1} 1$ | 128 | 13 | [14 | $1{ }^{1}$ | $1{ }^{185}$ | 17 | 18 | 19 | 96 |  |
| $\begin{aligned} & \$ 93,700 \\ & 168,428 \end{aligned}$ | $\$ 500$, 989,500 | $31,448,50$ | \$4, 292 | $\begin{array}{r} 818,597 \\ 58,817 \end{array}$ | \$200 | 0 | $\begin{array}{r} 566,154 \\ 8,111 \end{array}$ | \$89, 243 $123,53 \%$ | $\$ 29,369$ 93,977 | 290 291 |
| 12,000 | 90,000 | 0 |  |  |  |  |  |  |  | 292 |
| 10,000 | 350,000 | 100, 000 | 1\%,086 | 5,000 | 2ั, 000 | 0 | 4,000 | 51,086 | 8,000 | 293 |
| 7,000 | -150,000 | 7,000 | 4,000 | 250 | 0 | 0 | 3,750 | 8,0010 |  | 294 |
| 10,000 | 150, 000 | 120,000 | 8,000 | 7,500 | 0 | 0 | 500 | 16,000 | 8,000 | 295 |
| 40,000 | 230,000 | 231, 750 | 3,000 | 18,750 | 0 | 0 | 12,250 | 34, 000 | 55, 000 | 296 |
| 2,000 | 75,000 | 51, 000 | 5,000 |  |  |  |  | 5, 060 |  | 297 |
| 1,000 | 40,000 | 50, ט60 | 2,500 | 2,500 | 0 | 0 | 5,600 | 10,600 | 610 | 298 |
| 1,300 1,500 | 25,000 |  | 2,200 | 0 500 | 0 0 | 0 |  | 2,200 | 1,500 | 299 300 |
| 1,500 | 15, 000 | 12,000 | 1,500 | 500 1,500 | 0 | 0 | 0 | 2,000 |  | 300 |
| 500 8,000 | 10,000 | 32,000 | 2,500 | 1,500 | 0 | 0 | 0 | 4,000 |  | 301 |
| 8,000 | $8: 3,000$ 10,000 | 31,2'38 | 8,158 2,000 | 0 | 0 0 | 0 0 | 154 | 8,312 2,000 | 12,873 | 302 303 |
| 1,000 | 125,000 | 0 |  |  |  |  |  |  |  | 304 |
| 10,000 400 | 50,000 | 2 20.000 | 13, 763 | 17,037 | 0 | 0 | 0 | 30, 800 | 2,500 | 305 |
|  | - |  |  |  |  |  |  |  |  |  |
| 2,2¢2 | 37,000 | 40,000 | 2,390 | 3,290 |  | 0 | 0 | 5,590 | 10,000 | 307 |
| 10,000 | 125,000 40,600 |  | 1,800 750 |  | 45, 734 | 0 0 | 0 0 | $\begin{array}{r} 47,534 \\ 750 \end{array}$ | 14,000 | 308 308 |
| 12,000 | 125, 000 | 200, 060 | 4,276 | 6,200 | 0 | 0 | 2,238 | 12,714 | 34, 800 | 310 |
| 78,500 | 115, 000 | 62, 800 | 10,500 | 3,485 | 0 | 0 | 0 | 13,985 | 5, 4:5 | 311 |
| 25,000 | 201, 000 | 150, 000 | 4,300 | 8,000 | 30,800 | 0 | 0 | 43, 100 |  | 312 |
| 1,000 | 135, 844 | 79,019 | 3,036 | 3, 783 | 0 | 0 | 163 | 6,982 | 3, 1720 | 313 |
| 1,000 | 96, 800 | 102,000 |  |  |  |  |  | 7,272 | 20,000 | 314 |
| 2 7 7 2 000 | 15,000 160,000 | 20,000 | 1,500 | 1,300 | 0 | 0 | 0 | 2,800 | 600 | 315. |
| 35,000 | 160,000 800,000 | 3, 857, 308 | 8,349 | 102, 243 | 60,716 | 0 | 0 | 171,308 | 115, 1000 | 316 317 |
| 2,000 | 150, 000 | , 0 |  |  |  |  |  |  |  | 318 |
| 95,000 | 979,090 | 1,112, 718 | 53,030 | 70,000 | 0 | 0 | 0 | 123,000 | 80,000 | 319 |
| 5,006 | 125,000 | 1, 36, 793 | 2,900 | 1,096 | 0 | 0 | 9,887 | 13, 883 |  | 300 |
| 200,000 | 2,470,000 | อ53, 894 | 35̃, 335 | 33,204 | 166,076 | \$25, 000 | 56,003 | 315, 618 | 7,000 | 321 |
| -100 | 29,000 | 2,000 | 1,556 | 100 | 0 | - 0 | 0 | 1,6a56 | 2,000 | 32\% |
| 40,000 | 379,727 | 728,029 | 29, 400 | 36,205 | 0 | 0 | 0 | 65,605 | 105, 015 | 323 |
| 400 | 100, 000 | 50,000 | 2,720 | 2,952 | 0 | 0 | 0 | 5,672 | 30, 153 | $3 \% 4$ |
| 25,000 | 295, 000 | 262,000 | 3,000 | 16,500 | 0 | 0 | 2,500 | 22, 1000 | 32,500 | 325 |
| 18,000 | 160,000 | 410, 000 |  |  |  |  |  |  | 12,000 | 326 |
| 2,000 3,000 | 100,000 50,000 | 100, 000 | 10,000 | ธ, 000 | 0 | 0 | 2,500 | 17,500 | ---------- | 3.7 $3 \% 8$ |
| 3,000 18,000 | 50,000 120,000 | 0 120,000 | 5,300 | 7,700 | 0 | 0 | 0 | 13,000 |  | $3 \% 8$ $3 \% 9$ |
| 3,000 | 12,000 | - 0 | 2,500 | - 0 | 0 | 0 | 0 | 2,500 |  | 330 |
| -2,000 | 28,900 | 36,500 | 4,558 | 2,587 | 0 | 0 | 1,134 | 8,279 | 3,7\%9 | 331 |
| 50,000 | 654, 000 | 1,028,346 | 86,414 | 46,383 | 9.2 | 0 | 2,313 | 135, 115 | 159,000 | 338 |
| 15,000 | 150, 000 | 50,000 | 2,141 | 2,811 | 22,391 | 0 | 8,948 | 36,291 |  | 333 |
| 1,000 | 40,000 35,000 | 0 69,500 | 3, 000 | 0 4,100 | 0 0 | 0 0 | 0 0 | 3,000 6,300 | 150 | 335 |
| 3, 300 | 80,000 | 65, 00 | 4, 000 |  | 0 | 0 | 1,000 | 5,000 | 5,000 | 336 |
| 2,000 | ๕วั0, 000 | 175,000 | 10,000 | 10, 000 | 0 | 0 | 0 | 20,000 |  | 337 |
| 800 | 125,000 | 91,000 | 3, 073 | 3, 873 | 0 | 0 | 0 | 6,946 | 100 | 338 |
| 3,000 | 65, 000 | 70, 000 | 5,406 | 4,496 | 0 | 0 | 4,000 | 13, 90; | 4,000 | 339 |
| 14,000 | 114,000 | 30, 400 | 2,364 | 1,636 | 16,868 | 0 | 6,142 | 27,010 |  | 310 |
| 3,000 | 25,000 | 40,000 | 3,500 | 2,200 | 0 | 0 | 700 | 6,400 |  | 311 |
| 40,000 2,000 | 200,000 200,060 | 370,000 105,000 | 15,000 3,200 | 10,400 5,700 | 0 0 | 0 | 24,000 0 | 49,400 8,900 | 20,000 1,000 | 34\% |

Table 30.-Statistics of universities and colleges

$a$ Including tuition.
$b$ The real estate, libraries, museums, and securities hare not been appraised within recent years. A reappraisal would add very largely to the estimated ralue, and such reappraisal will be made in the near future. [Provost Harrison.]
for men and for both sexes－Continued．

| Value of scientific appa－ ratus． | Value of grounds and buildings． | Produc－ tive funds． | Income． |  |  |  |  |  | Benefac－ tions． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | From tuition and other fees． | From produc－ tive funds． | From State or munic－ ipal appro－ pria－ tions． | From <br> United <br> States Gov－ ern． ment appro－ pria－ tions． | From other sour－ ces． | Total． |  |  |
| 且且 | 直㴓 | 直3 | 14 | 15 | 16 | 17 | 18 | 19 | 36 |  |
| \＄7，C．C0 | \＄60， 000 |  | \＄1，200 | 0 | \＄19， 000 | 0 | 0 | \＄20，200 |  | 344 |
| 1，000 | 40，500 | \＄1，212 | 4，322 | \＄80 | 0 | 0 | 0 | 4， 402 | \＄11， 462 | 345 |
| 13， 000 | 150，000 | 155，000 | 2，240 | 8，256 | 30，000 | 0 | \＄3，150 | 43， 616 | 811， | 346 |
| 5，350 | 86，000 | 196， 697 | 9，096 | 7，983 | 0 | 0 | 1，034 | 18，113 | 13，246 | 317 |
| 5，000 | 35， 000 | 40，000 | 2，000 | 2，500 | 0 | 0 | 0 | 4， 500 | 1，000 | 348 |
| 500 | 15，000 | 6，000 | 2，500 | 300 | 0 | 0 | 500 | 3，300 |  | 349 |
| 1，000 | 10，000 | 5，000 | 1，600 | 300 | 0 | 0 | 0 | 1，900 |  | 350 |
| 5， 000 | 200， 0 C0 | 41，000 | 4，217 | 2，800 | 0 | 0 | 0 | 7，017 | 2，500 | 351 |
| 93，500 | $300,0<0$ | 450， 000 | \％6，c00 | 18，000 | 2，500 | 0 | 0 | 96，500 | 40，000 | 35\％ |
| 2,000 2,000 | 100,000 95,000 | 161,720 75,000 | 6，298 | 7，97\％ | 0 | 0 | 1，947 | 16，212 | 9，\％11 | 353 |
|  | 150，000 | 0 |  |  |  |  |  |  | 0 | 355 |
| 5， 000 | 100，000 | 10，000 | 14，200 | 0 | 0 | 0 | 0 | 14，200 | 5，000 | 356 |
|  | 175，000 | 150，000 |  |  |  |  |  |  | $\ldots$ | 357 |
| 5,000 10,000 | 100,000 303,300 | 115,000 367,008 | 600 29,405 | $\begin{array}{r}5,500 \\ 17 \\ \hline\end{array}$ | 0 | 0 | 2，900 | 9，000 | 1， 000 | 358 |
| 10，000 | 303,300 100,000 | 367， 008 | 29，405 | 17，4：4 | 0 | 0 | 0 | 46，829 |  | 359 360 |
| 15，000 | 120，000 | 185， 000 | 7，115 | 8，933 | 0 | ${ }^{-}$ | 6，2\％5 | 22， 321 | 6，711 | 361 |
| 30，000 | 650，000 | 2ゴ8，250 | 22，756 | 17， 5 ธ̃9 | 0 | 0 | 0 | 40，315 | 70，000 | 362 |
| \％5， 000 | 300，000 | 210，000 | 13， 550 | 9， 002 | 0 | 0 | 1，747 | 24，299 | 4，000 | 363 |
| 12，000 | 60，000 | 62，500 | 4，500 | 3，500 | 0 | 0 | 1，200 | 9， 200 | ， | 354 |
| 5，000 | 200，000 | 0 | 20，600 | 0 | 0 | 0 | 1， 0 | 20，000 |  | 365 |
| 80，000 | 400，000 | 800，090 | 39，000 | 32， 000 | 0 | 0 | 6，000 | 77，003 | 60，000 | 366 |
| 10， 000 | 107，000 | 20，000 | 8，084 | 1037 | 0 | 0 | 0 | 8，321 | 6，721 | $36 \%$ |
| 30， 000 | 255，000 | 340，000 | 10，000 | 16，000 | 0 | 0 | 0 | 26， 000 | 20，000 | 368 |
| －5－90－ | 350， 000 | 400，000 |  |  | 0 | 0 | 0 | 67， 000 |  | 369 |
| 5,500 \％5， 000 | 265,500 150,000 | 493,000 200,000 | 1，156 | 21，386 | 0 | 0 | 12，090 | 34，632 | 0 | 370 |
| 75,000 10,000 | 150,000 40,000 | 200， 000 | 12,800 8,000 | 8，200 | 0 | 0 | 5，000 | 26， 000 | 10，000 | 371 |
| 10,000 2， 015 | 40，000 | － 0 | 8，000 | 0 | 0 | 0 | 3， 030 | 11， 030 |  | 372 |
| 40，000 | 200，000 | 40,400 200,000 | 2,933 16,128 | 753 $7,87 \%$ | 0 | 0 0 | 777 0 | 4，463 | 15， 500 | 373 |
| 15， 000 | 1，011，363 | 0 | 16， 0 | － 0 | 124，643 | 0 | 0 | 134,643 |  | 375 |
| －385， 800 | 250，000 | 0 |  |  |  |  |  |  |  | 376 |
| 6385，521 | 34，272， 654 | 33，091，575 | 354， 601 | 144， 313 | 22， 345 | 0 | 0 | 521，259 | 530， 654 | 377 |
| 1， 1,500 | 150， 000 | 0 | 17，000 | 1 0 | 0 | 0 | 0 | 17，000 | 1，000 | 378 |
| 1,500 50,000 | 60，000 | 40，000 | 4，388 | 1，962 | 0 | 0 | 709 | 7， 059 | 1， 467 | 379 |
| 50，000 | 1，250，000 | 2，000，000 | 24，500 | 1， 0 | 0 | 0 | 75，000 | 99，500 |  | 380 |
| 60,000 15,000 | 790，000 | 517，000 | 16，91\％ | 31，020 | 27，776 | \＄40，000 | 2，913 | 118，626 |  | 381 |
| 15,000 2,000 | 500,000 350,000 | 420，000 | 60，000 | 18，500 | 0 | 0 | 3，500 | 82，000 | 30， 000 | 38.3 |
| 1，000 | 6，000 | 0 | 1，300 |  | 0 | 0 | 0 | 1，300 | 0 | 383 384 |
| 25，000 | 275，000 | 280， 000 | 17，971 | 10，960 | 0 | 0 | 0 | 28，931 | 1，500 | 385 |
| 2，0c0 | 100，060 | 41，488 | 4，614 | 1，800 | 0 | 0 | 2，039 | 8，453 | 3，000 | 386 |
| 90， 650 | 1，17\％，96\％ | 1，297，2\％8 | 97，266 | r．8，393 | 0 | 0 | 1，265 | 176，924 | 151，815 | 387 |
| 1u，000 | \％5， 000 | 299，000 | $\% 00$ | 10，500 | 2，500 | 0 | 0 | 13， 700 | 500 | 388 |
| 1，550 | －14，C00 | 0 | 1，800 | 0 | 0 | 0 | 0 | 1，800 | 900 | 389 |
| 25， $\begin{array}{r}400 \\ \hline 000\end{array}$ | 30,000 200,000 | 0 0 | $\frac{1}{5}, 001$ | 0 0 | 27， $\begin{array}{r}0 \\ 200\end{array}$ | 0 0 | 0 0 | 1,001 $3 \%, 00$ | 0 | 390 391 |

Table 30.-Statistics of universities and colleges

*Statistics of 1898-99.
$a$ Free to residents; $\$ 60$ to nonresidents.
for men and for both sexes-Continued.

| Value of scientific apparatus. | Value oî grounds and buildings. | Productive funds. | Income. |  |  |  |  |  | Benefactions. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | From tuition and other fees. | From productive funds. | From State or municipal appro-priations. | From United States Gov-ernment appro-priations. | From other sources. | Total. |  |  |
| 1显 | 12 | 13 | 14 | 15 | 16 | 18 | 18 | 19 | 820 |  |
| \$10,000 |  |  | \$1,000 |  | 0 | 0 | 0 | \$16, 000 | \$20,000 | 392 |
| \$10,000 | 100,000 | 65, 000 | 6,000 | 5,500 | 0 | 0 | 0 | 11,500 |  | 393 |
|  | 45, 000 | 32,000 | 4,000 | 1,832 | 0 | 0 | S*, 000 | 7,832 | 600 | 394 |
| 5,000 | 150,000 | - 0 | 4,000 |  | 0 | 0 | 8,000 | 12,000 | 25,000 | 395 |
| 3,000 | 125, 000 | 62, 000 | 5,720 | 3,500 | 0 | 0 | 1,95*' | 11,177 | 1,100 | 396 |
| 1,000 | 16,500 | 0 | 2. 800 | 0 | 0 | 0 | 0 | 2, 800 | 5, 779 | 397 |
| 5,000 | 80,000 | 0 | 7,209 | 0 | 0 | 0 | 4,329 | 11, 538 | 5, | 398 |
|  | 20,000 150,000 | 0 |  |  |  |  |  |  |  | 399 |
| 30,009 3,900 | 150,000 122,500 | 0 100,000 | 6,000 4,600 | 0 4,000 | \$33, 000 | 0 0 | 1,000 0 | 40,000 8,000 | 90,000 | 400 401 |
|  | 300,000 | 10,800 | 12,806 | 400 | 0 | 0 | 8,917 | 22, 123 | 8,200 | 402 |
| 500 | 30,000 | 18,000 | 1,900 | 1,000 | 0 | 0 | 500 | 3,400 | 2,500 | 403 |
| 13,000 | 60,000 | 276,000 | 2,000 | 20,000 | 0 | 0 | 0 | 22,000 | 66,500 | 404 |
| 2,500 | \%5,000 | 0 | 3,500 | 0 | 0 | 0 | 500 | 4,000 | 5,000 | 405 |
|  | 10,000 | 0 |  |  |  |  |  |  |  | 406 |
| 4,500 | 50,000 | 70,000 | 8,500 | 4,200 | 0 | 0 | 0 | 12, 400 |  | 407 |
| 2,000 | 100, 000 | 0 | 1,000 | 0 | 2,900 | 0 | 1,600 | 5, 500 |  | 408 |
| 94,500 | 611,000 | 4\%5.000 | 11,584 | 25,410 | 0 | \$10,000 | 6,865 | 83, 859 |  | 409 |
| 12,000 | 100,000 | 85, 000 |  |  | 0 | 0 | 0 | 15,000 | 0 | 410 |
| 500 5,000 | 14,000 98,568 | 247, 0 |  |  |  |  |  |  |  | 411 412 |
| 5,000 | 98,568 80,000 | 247, 364 | 4,030 | 12, 926 | 0 | 0 | 883 | 17,839 | 5,000 | 412 413 |
| 150 | 15,000 | 0 | 3, 700 | 0 | 0 | 0 | 200 | 3,900 | 1,700 | 414 |
| 1,000 | 50,000 | 35,000 | 5,000 | 1,000 | 0 | 0 | - 0 | 6,000 | 10,000 | 415 |
| 2,000 | 105,000 | 2,300 | 6, 169 | . 500 | 625 | 0 | 8,500 | 15,794 | 7,500 | 416 |
| 15,000 | 350,000 | 40,000 | 7,000 | 2,400 | 0 | 0 | 35,091 | 42, 491 | 5,000 | 417 |
| 500 | 200, 000 | 0 | 1, 8\%3 | 0 | 0 | 0 | 8,190 | 10,013 |  | 418 |
| 10,000 | 200,000 | - 0 | 5,000 | - 0 | 20,000 | 0 | 40, 800 | 6j, 800 | - 0 | 419 |
| 200,000 | 750,000 | 1,200,000 | 83,000 | 50,000 | - 0 | 0 | 0 | 133, 000 | 150,000 | 420 |
| 5, 000 | 318, 000 | 187,156 | 22, 467 | 10,580 | 0 | 0 | 25,831 | 59,878 | 15,925 | 421 |
| 2,500 | 20,000 | 0 0 | 5,785 | 0 | 0 | 0 | 0 0 | 5,785 |  | $42 \%$ |
| 2, ${ }^{25}$ | 20,000 23,000 | 2, $\begin{array}{r}0 \\ \hline\end{array}$ | 3,509 1,895 | 0 50 | 0 0 | 0 0 | 0 0 | 3.500 1,945 |  | 423 424 |
| 2,605 | 23, 000 | 2,305 | 1,895 | 50 | 0 | 0 | 0 | 1,945 | 2,681 | $42 \pm$ |
| 3,000 | 34, 000 | 5,000 | 1,600 | 300 | 0 | 0 | 0 | 1,900 | 1,700 | 425 |
| 15,000 | 110,000 | - 0 | 2.5, 000 | - ${ }^{0}$ | 0 | 0 | 0 | 25,000 | - 0 | 426 |
| 100,000 | 400, 000 | 626,716 | 15,000 | 31,895 | 78,000 | 0 | 44,400 | 169, 295 | 7,500 | 427 |
| 2,000 | 40,000 | 0 | 5,000 | 0 | 0 | 0 | 0 | 5,000 | 20,000 | 428 |
| 3,000 | 18,000 | 0 0 | 13,000 | 0 | 0 | 0 | 0 | 13,000 | 0 | 429 430 |
| 7,5:0 | 125,000 | 0 | 9,000 | 0 | 0 | 0 | 0 | 9,000 |  | 431 |
| 400 | 60,000 | 0 |  |  |  |  |  |  |  | 432 |
| 5, 000 | 151,000 | 0 | 10, 787 | 0 | 0 | 0 | 10,914 | 21, 701 |  | 433 |
| 2,500 | 30,000 |  |  |  |  |  |  |  |  | 434 |
| 7,500 | 75,000 | 0 | 6,000 | 0 | 0 | 0 | 2,000 | 8,000 | 2,060 | 435 |
| 250 | 30,000 | 0 | 1,600 | 0 | 0 | 0 | 3,000 | 4,600 |  | 436 |
| 900 | 200, 000 | 0 | 18,000 | 0 | 0 | 0 | 0 | 18,000 | 0 | 437 |
| 3,000 | 50,000 | 60,000 | 4,000 | 3,000 | 0 | 0 | 0 | 7,000 |  | 438 |
| $\underset{\sim}{2}, 000$ | 80, 000 | 33, 000 | 5,500 | 3,000 | 0 | 0 | 0 | 8,500 | 37, 100 | 439 |
| 7,000 2,000 | $\begin{array}{r}22.2 \\ 75,000 \\ \hline\end{array}$ | 0 0 | 30,000 4,410 | 0 0 | 0 0 | 0 0 | 3, $\begin{array}{r}0 \\ 3\end{array}$ | 20,000 8,231 | 30,000 | 410 441 |

Table 30.-Statistics of universities and colleges


[^112]for men and for both sexes-Continued.

| Value of scientific apparatus. | Value of grounds and buildings. | Productive funds. | Income. |  |  |  |  |  | Benefac tions. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | From tuition and other fees. | From productive funds. | From State or municipal appro-priations. | From <br> United <br> States Gov-ernment appro-priations. | From other sources. | Total. |  |  |
| 筫 1 | 12 | 13 | 14 | 1 ${ }^{5}$ | 16 | 17 | 18 | 19 | 29 |  |
| 810,596 1,000 | $\$ 81,468$ 100,000 | $\$ 100,000$ 7,000 | \$4, 131 | \$5, 874 | 0 | 0 | \$10, 200 | \$20, 205 | 4, 8124 | 442 443 |
| 18,000 | 85,000 300,000 | 150,000 | 7,124 |  | \$61,318 | 0 | 4,307 | 72,749 | 60 | 444 445 |
| 65, 060 | 600,000 | 452,000 | 12, 715 | 26, 880 | 6, 000 | \$25, 000 | 4, 649 | 75,244 | 68, 3C0 | 416 |
| 11, 000 | 150,000 | 370, 000 | 1,039 | 18,206 | 2,400 | 0 | 2,838 | 24,483 | 73, 520 | 447 |
| 1,500 | 35,000 | 3,500 | 4,000 | 160 | 7,200 | 0 | 240 | 11,600 | 1,500 | 448 |
| 16, 000 | 95, 000 | 135, 000 | 7,441 | 7,840 | 0 | 0 | 3, 860 | 19,141 | 2,000 | 449 |
| 1,200 | 9,200 | 11,000 | 3, 935 | . 290 | 0 | 0 | 0 | 4,223 |  | 450 |
| 100,000 | 1,000, 000 | 375, 600 | 73, 387 | 19,884 | 48,750 | 0 | 4,304 | 146, 325 |  | 451 |
| 1, 500 | 100,000 | 25, 000 | 6,217 | 500 | 0 | 0 | 3,397 | 10, 114 | 531 | 45\% |
| - 600 | 12,000 | - 0 | 4,000 | - 0 | 0 | 0 | 0 | 4,000 |  | 453 |
| 5,000 | 175, 000 | 150,000 | 4, 300 | 8,200 | 0 | 0 | 0 | 12, 500 |  | 454 |
| 16,000 | 200,000 | 626, 426 | 9,500 | 34,500 | 0 | 0 | 0 | 44,000 |  | 455 |
| 5,000 | 600,000 | 270,000 | 15,000 | 15,000 | 0 | 0 | 0 | 80,000 | 15, 000 | 456 |
| 300 | 300, 000 | 7e, 000 | 1,200 | 4,000 | 0 | 0 | 0 | 5,200 | 50,000 | 457 |
| 5, 000 | - 75, 000 | 65, 000 | 6,000 | 3,000 | - 0 | 0 | 6,500 | 15, 500 | 10,000 | 458 |
| 25,000 | -125, 000 | 127,900 | 997 | 4,034 | 15,000 | 0 | 181 | 20,212 | 10, | 459 |
| 2,500 | 33, 000 | 0 | 20, 780 | 0 | 0 | 0 | 0 | 20,780 |  | 460 |
| 27,000 | 6\%0, 000 | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 | 50,000 | 461 |
| 3,000 | 300, 000 | 8 | 20,000 | 0 | 0 | 0 | 0 | 20,000 | , | 462 |
| 1,500 | 30,000 | 8,500 | 1,800 | 510 | 0 | 0 | 1,500 | 3, 810 | 2,690 | 463 |
| 3,000 | 100,000 | 0 | 600 | 0 | 0 | 0 | 800 | 1,400 | 100,000 | 464 |
| 8,000 5,000 | 10,000 130,000 | 0 180,000 |  |  |  |  |  |  |  | 465 466 |
| 5,000 | 130, 000 | 180, 000 | 8,500 | 12,000 | 0 | 0 | 0 | 20, 500 | \%5,000 | 466 |
|  | 20,000 | 0 | 1,200 | 0 | 0 | 0 | 0 | 1,260 |  | 467 |
| 1,000 30,000 | 200,000 $2 \% 5,000$ | 55,000 114,750 | 8,135 | 6,168 | 108, 360 | 25, 000 | 8, 496 | 166,099 | 50, 000 | 468 469 |
| 20,000 | 180, 000 | 205, 000 | 7,855 | 10,004 | 6, 200 | 0 | - 0 | 24,059 | 7,000 | $4 \% 0$ |
| 75, 000 | 335,000 | 448,132 | 12, 780 | 15, 113 | 0 | 0 | 2,740 | 36,683 |  | 471 |
| 2,500 | 40,000 | 24,000 | 1,952 | 573 | 0 | 0 | 0 | 2,525 | 10,349 | $47 \%$ |
| 1,000 | 30,000 $1,208,945$ | 530, 0 | 1, 300 | 0 24,500 | 268,000 | 40, 000 | 4, 500 | 6,000 369,935 |  | $4 \% 3$ |
| 347,700 8,500 | $1,208,945$ 28,500 | 530,000 83,743 | 36,235 2,161 | 24,500 5,319 | 268, 000 | 40,000 0 | 1,200 | 369,935 $10,05 \%$ | 27 | $4 \% 4$ $4 \% 5$ |
| 1,500 | 150,000 | 0 | 0 | 0 | 0 | 0 | 100 | -100 | 12,000 | 476 |
| 2,725 | 130, 000 | 5,000 | 7,376 | 300 | 0 | 0 | 0 | 7,676 | 3,040 | 477 |
| 5,000 | 125, 000 | 218, 919 | 4, 427 | 14,109 | 0 | 0 | 0 | 18, 536 | 19,816 | 478 |
| 8, 000 | \%0,000 | 0 | 1,003 | 0 | 0 | 0 | 10,000 | 11,003 |  | $4 \% 9$ |
| \%\%, 500 | 125,000 | $\%, 000$ | 461 | 0 | 14, 845 | 40,000 | $46 \%$ | 55, \%\%3 | 0 | 480 |

Table 31.—Staitistics of colleges

for women, Division $A$.


Table 32.—Statistics of colleges

for women, Division $B$.


Table 32.—Statistics of colleges

for wonen, Division B-Continued.


Table 32.-Statisticu of colleges

|  | Location. | Name. | $\begin{gathered} \text { Year } \\ \text { of } \\ \text { first } \\ \text { open- } \\ \text { ing. } \end{gathered}$ | Religious or nonsectarian control. | Professors and in-structors. |  | Students. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 8.8. |
|  |  |  |  |  | $\begin{aligned} & \text { gio } \\ & \text { y } \end{aligned}$ | $\begin{aligned} & \text { aं } \\ & \text { a } \\ & \text { 最 } \end{aligned}$ |  |  |  |  |  |
|  | 1 | ${ }^{3}$ | 3 | 4 | 5 | 6 | 8 | 89 | 10 | 11 | 13 |
|  | NORTH CAROLINA. |  |  |  |  |  |  |  |  |  |  |
| 72 | Asheville | Asheville College for Young Women. | 1842 | Nonsect.-.- | 5 | 10 | 30 | 7280 | 2 | 184 | d |
| 73 | Charlotte | Elizabeth College........... | 1897 | Luth | 8 | 11 | 5 | 10101 | 0 | 116 | \% |
| 74 | Dalla | Gaston College | $18 \% 9$ | Luth | 2 | 4 | 0 | $35 \quad 36$ | 0 | 71 | 2 |
| 175 | Greensboro | Greensboro Female College. | 1846 | M. E. So | 3 | 12 | 0 | 0160 | 0 | 160 | 7 |
| 76 | Hickory | Clas'emont Female College | 1880 | Nonsec | 4 | 11 | 0 | 40110 | 0 | 150 | 9 |
| 77 | Louisbur | Louisburg Female College | $185 \%$ | M. E | 2 | 10 | 40 | 4080 | 1 | 161 | 12 |
| 78 | Murfreesboro .- | Chowan Baptist Female Institute.* | 1818 | Bapt....--- | 2 | 6 | 0 | $10 \quad 46$ | 1 | 57 | 3 |
| 79 | Oxford | Oxford Female Seminary * | 1850 | Bapt | 2 | 7 | 25 | $20 \quad 85$ | 0 | 130 | 5 |
| 80 | Salem. | Salem Female Academy and College. | 1802 | Moravian.. | 5 | $2 \%$ | 0 | $7 \% 156$ | 2 | 311 | 59 |
| 81 | Glendal | Glendale Colleg | 18 ² | Presb | 1 | 11 | 0 | 1534 | 0 | 60 | 7 |
| 82 | Oxford | Oxford College | 1849 | Presb | 4 | 22 | 0 | $\begin{array}{lll}22 & 54\end{array}$ | 4 | 144 | 20 |
| 83 | --do | Western College .-..-..--- | 1885 | Nonsect | , | 21 |  | 10074 | 0 | 174 | 14 |
| 84 | Painesvilie $\qquad$ <br> PENNSYLVANIA. | Lake Erie College and Seminary. | 1859 | Nonsect | 2 | 22 | 0 | 3086 |  | 120 | \% |
| 85 | Allentown | Allentown College for Wornen. | $186{ }^{\circ}$ | Reformed.. | 6 | 9 | 19 | 35.57 | 0 | 126 | 11 |
| 88 | Eetblehem | Moravian Seminary and College for Women. | 1749 | Moravian .- | 4 | 18 | 13 | 802 | 0 | 97 | 16 |
| 87 | Blairsville -.... | Blairsville College.-.-. .-. | 1851 | Nonsec | 3 | 8 | 0 | 38.33 | 0 | 81 | 4 |
| 88 | Chambersburg | Wilson College - | 1870 | Presb | 4 | 28 | 0 | 41254 | 4 | 299 | 59 |
| 89 | Mechanicsburg - | Irving Female College...- | 1856 | Luth. | 8 | 8 | 0 | 4119 | 0 | 123 | 15 |
| 90 | Pittsburg SOUTH CAROLINA. | Pennsylvania College for Women. | 1869 | Presb | 4 | 22 |  | $16086$ | 1 | $24 \%$ | 5 |
| 91 | Columbia | Columbia Female College | 1859 | M. E. So | 4 | 10 | 0 | 0124 | 0 | 124 | 5 |
| 92 | do | Presbyterian College for Women. | 1890 | Presb ....--- | 4 | 14 | 25 | $42115$ | 1 | 183 | $m$ |
| 93 | Due West | Due West Female College. | 1859 | A. R. Presb. | 5 |  |  | 096 | 0 | 96 | 20 |
| $9 \pm$ | Gaffney | Limestone College *- ----- | 1845 | Bapt ------ | 1 | 5 | 60 | $=12$ | 0 | 102 | 16 |
| 95 | Greenville | Greenville College for Women. | 1894 | Nonsect...- | 3 | 3 | 15 | 15 35 | 7 | $7 \%$ | 6 |
| 96 |  | Greenville Female College | 1854 | Bapt .-....- | 4 | 10 | 0 | 20145 | 0 | 165 | 20 |
| 97 | Spartanburg | Converse College...-...-.-- | 1890 | Nonsect...- | 8 | 18 | 0 | 0396 | 10 | 406 | 40 |
| 98 | Union -.... | Clifford Seminary ..........-- | 1881 | Presb --... | 1 | . | 15 | 625 | 3 | 49 | 2 |
| 99 | Williamston . <br> TENNESSEE. | Williamston Female College. | $18 \%$ | M. E.So .... | 2 | 7 | 0 | 5560 | 0 | 115 | 3 |
| 100 | Bristol .-... | Sullins College ........-....- | $18 \% 0$ | M. E. So .-. | 3 | 16 | 21 | 60 \&8 | 0 | 199 | 5 |
| 101 | Brownsville | Brownsville Female College. | 1851 | Bapt .-.-.--- | 2 | 1 | 30 |  | 3 | 88 | 3 |
| 102 | Columbia | Columbia Athenæum* ... | 1852 | Nonsect.... | 4 | 8 | 42 | 5036 | 4 | 134 | 7 |
| 103 | Franklin | Tennessee Female College | 1856 | Nonsect...- | 2 | 12 | 20 | 30125 | 0 | 175 | 9 |
| 104 | Gailatin. | Howard Female College -- | 1836 | Nonsect.... | 2 | 6 | 14 | $26 \quad 50$ | 0 | 90 | 8 |
| 105 | Jackson -----. | Memphis Conference Female Institute. | 1843 | M. E. So --. | 2 | 15 | 25 | $29176$ | 5 | 2\%8 | 22 |
| 106 | Murfreesboro. | Soule Female College ..... | 1852 | M.E.So-.. | 1 | 12 | 20 | $40115$ | 2 | $17 \%$ | 19 |
| 107 | Nashville ...... | Boscobel College .-.-....... | 1889 | Nonsect.... | $\stackrel{2}{9}$ | 10 | 8 | 30.29 | 0 | 67 362 | 3.4 |
| 108 | pulo | Ward Seminaly - .-......- | 1865 | Presb | 9 | 20 | 30 | 32228 | 0 | 362 | $3:$ |
| 109 | Pulaski.-. | Martin Female College...- | 1880 |  | 2 | 12 | 25 | 20.50 | 0 | 95 | 0 |
| 110 | Rogersville | Rogersville Synodical Col- lege. | 1849 | Presb ...... | 3 | 12 | 0 | $25165$ | 0 | 190 | 12 |

for women, Division B-Continued.


Table 32.-Statistics of colleges

for women, Division B-Continued.


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schools of technology.


Table 34.-Statistics of schools

|  | Nome. | $\left\lvert\, \begin{gathered} \text { Ex- } \\ \text { penses } \\ \text { in col- } \\ \text { lege de- } \\ \text { part- } \\ \text { ment. } \end{gathered}\right.$ |  | An- <br> nual living' expenses. |  |  | Number of scholarships. | Library. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $$ | $\dot{0}$ 0 0 0 H d a 0 | +3 0 0 0 0 |  |  |  |  |  | $\frac{\stackrel{0}{8}}{\stackrel{\text { cin }}{8}}$ |
|  | 1 | 2 | 3 | 4 | 5 | 6 | g | 9 | 4 | 10) |
| 1 | Alabama Polytechnic instituta |  |  |  |  |  |  | 13, 95 \% | 800 |  |
| \% | Colorado Agricultural Coliege |  |  |  |  |  |  | 10,000 | 1,003 | 10,702 |
| 3 | Colorado State School of Mines |  |  |  | 00 |  |  | 4, 420 |  | 10,650 |
| 4 | Connecticut Agricaltural Colle | 0 |  |  | 150 | 0 | 6 | 7, 409 | 3, 000 | 20, 000 |
| 5 | Georgia School of Technology |  |  |  | 180 |  |  | 1.500 |  |  |
| 6 | Armour Institute of Technolog |  |  | 175 | 200 |  | 4 | 18,000 |  |  |
| 7 | Purune University |  | \{2\%- |  | 200 | 0 | 0 | 10, 051 | 3,2\%2 | 10, 300 |
| 8 | Rose Polytechnic Institnte |  |  |  | 275 |  |  | 9,245 | 1,500 | 19,003 |
| 9 | Iowa College of Agriculture and Mechanic Arts. |  |  |  |  |  |  | 12, 460 | 2,000 | 50,0(t) |
| 10 | Kansas State Agricultural College ............. |  |  |  | 150 | 0 |  | 21,450 | 17,000 | 43, 100 |
| 11 | United States Naval Academy |  |  |  |  |  |  | 11,050 |  | 85, 000 |
| 12 | Massachusetts Agricultural College |  |  |  |  |  |  | 21,0:5 |  | 21, 000 |
| 13 | Massachusetts Institute of Technolo |  |  |  |  |  |  | 50, 149 | 14, $6 \times 2$ | 100,000 |
| 14 | Worcester Polytechnic Institate.... | 150 |  | 130 | 135 | 3 | 65 | 6,500 | 3, (6) | 18,030 |
| 15 | Michigan Agricultural College |  |  |  |  |  |  | 19,84\% | 4,000 | 48, 000 |
| 16 | Michigan College of Mines . | (c) |  | 300 | 380 |  | - | 15,366 | 2, 355 | 31,270 |
| 17 | Mississippi Agricultural and Mechanical College. | (d) | 5 |  |  |  | 1 | 7,533 | 8,568 | 9,596 |
| 18 | Alcorn Agricultural and Mechanical College -- |  |  |  |  |  |  | 5,200 | 2,000 | 6,000 |
| 19 | Montana College of Agriculture and Mechanic Arts. | 12 |  | 110 |  | 0 | 0 | 4, 750 | 4, 000 | 10, 000 |
| 20 | New Hampshire College of Agriculture and Mechanic Arts. |  |  |  | 180 | 0 | 105 | 6,800 | 4,453 | 8,000 |
| 21 | Stevens Institute of Technology .-.......-. .-. -- | (e) |  |  |  |  |  | 9,500 |  | 18,000 |
| 22 | Newark Technical School |  |  |  |  | 0 | 0 | $96 \%$ |  | 1,600 |
| 23 | New Mexico College of Agricalture and MSechanic Arts. |  |  |  |  | 0 | 0 | 3,649 | 2, 000 | 7,500 |
| 24 | New Mexico School of Mines...------. --. - . |  |  |  |  |  | 0 | 400 | 200 | 500 |
| 25 | Ciarkson School of Technology | 80 |  | 120 | 160 | 0 | 3 | 778 | 1,498 | 2,226 |
| 25 | Rensselaer Polytechnic Iustitute | 200 |  | 190 | 300 | , | 0 | 6,500 | 1,500 | 10,006 |
| 27 | United States Military Academy .-................ |  |  |  |  | 0 | 0 | 43.000 | 10,000 | 10, |
| 28 | Agricultural and Mechanical College for the Colored Race (North Carolina). | 8 |  | 48 |  | (1) | , | \% 749 |  | 1,009 |
| 29 | North Carolina College of Agriculture and Mechanic Arts. |  |  |  |  |  |  | 3,400 | 1,060 | 3,500 |
| 30 | North Dakota Agricultrrai College............-- | 0 |  | 125 | 160 | , | 0 | 8, 000 | 250 | 15,000 |
| 31 | Case School of Applied sicienco | 10 |  | 180 | 809 | 0 | 9 | 2.000 |  | 5, 000 |
| 32 | Oklahoma Agricultural and Mechanical College. | , |  | 90 |  | , | 0 | 5,60\% | 4, 600 | 12,231 |
| 33 | Oregon State Agricultoral College -------... |  |  |  |  |  |  | 3,009 |  |  |
| $3 \pm$ | Rhode Island College of Agriculture and Mechanic Arts. | O |  |  | \% |  |  | 10,000 | 3,000 | 14,000 |
| 35 | South Carolina Military Academy .............. |  |  | G300 |  |  |  | 5,009 |  | 6,000 |
| 86 | Clemson Agricultural College .- |  |  |  |  |  |  | 4,200 | 1,500 | 6,000 |
| 37 | South Dakota Agricultural College | 6 |  | 115 | 114 | 0 | 51 | 5,900 | 10,000 | 6,500 |
| 38 | South Dakota State School of Hines. | 8 |  |  |  |  |  | -609 |  | 809 |
| 39 | Agricultural and Mechanical College of Texas. | 0 |  | 135 |  |  |  | $\overline{5}, 000$ | 4,000 | 5,500 |
| 40 | Utah Agricultural College - |  |  |  |  |  |  | 6,481 | 6.161 | 8,000 |
| 41 | Virginia Agricultural and Mechanical College | 30 |  | 81 | 81 | $\bigcirc$ | 206 | 3,300 | 1,200 | 5,000 |
| $4 \%$ | Virginia Military Inseitute | 75 |  | 90 |  | 0 | 4 | 10,840 | 5, 400 | 27,000 |
| 43 | Washington Agricultural College | , |  |  | 112 |  |  | 5,519 | 1,505 | 6, 700 |

a Free to residents; $\$ 50$ to nonresidents.
$b$ Iree to resideats of Vigo County, Ind.; others, $\$ 75$.
$c$ Residents of Michigan,
d Eree to residents: s: nonresidents.
$e 3150$ to residents;
$f 5$ to residents of United States; Siz to foreigners.
$g$ Including tuition.
of technology-Continucd.


## CHAPTER XXXVI.

PROFESSIONAL SCHOOLS.

The number of medical schools in 1900 was the same as the year before, 151; but the number of students was 25,213 , an increase of 1,435 , one-fifth of whom graduated, 5,219. Omitting three or four preparatory schools, all of the medical schools excopt 3 now require attendance during forr years before graduation, and 89 schools have anmal sessions of eight or nine monsths.

In the 96 law schools there were 12,510 stiudents, an increase of 642 . In 47 schools of law there are courses of three years, and practically all of the schools have annual sessions of eight or nine months.

The number of theological students decreased slightly, to 8,009 , while dental students increased to 7,928, and students in pharmaey to 4,042. By comparison of the summaries, it will be seen that there are about twice as many students in medicine as in law, and three times as many as in theology or dentistry, and six times as many as in pharmacy. It is also noticeable that the percentage of students graduating in medicine is smaller than in any of the other classes.

In regard to the value of grounds and buildings, so far as reported to this Office, there is no great difference between theological and medical schools, the former having about fourteen millions and the latter twe!ve and one-half millions, while law schools have about one and one-half millions. But as regards endowments there is a marked difference, theological having about twenty millions, medical orer two millions, and law schools only aiout half a million. It is true that some schools did not report as to this item, but when distributed in the different classes the proportion would probably remain unchanged. When the heavy expenses necessarily connected with laboratory and clinical instruction are considered, the endowment of medical schools here given dwindles into very inadequate proportions.
the mndownent of professional schools.
The Boston Medical and Surgical Journal, October 25, 1900, quotes the following from a recent article by Rev. James H. Ross, of Cambridge, Mass., relative to the question of the endowment of professional schools:

The question of the medical school and the law school receiving only those who have given themselves the advantage of a liberal education is a question of profound significance to American life. It is also, in particular, a question of gravity for every member of the professional faculty and for every member of the board of trust which manages a school of law or a school of medicine. For if the student is to give so large a share of his life"s time to the preparation for his life"s service, if he come up to the law school or to the school of medicine with powers well trained, with the capacity of appreciation large, with his character matured, he has a right to demand of the professional school that it shall give to him advantages adequate to the ripeness, richness, and maturity of his character. It is simply absurd for a medical school or a lav school, such as can be found in many of our States, to demand that candidates for admission shall have a college training; for the schools can not offer adequate opportrnities to men of these advanced attainments. For medical schools such as can be found in many of the great cities of this country to ask that students who are admitted shall be liberally educated, is quite as absurd as for a high school in New York or Boston to require that candidates for its junior class shall have already taken a college course. The medical
college which demands a liberal education from candidates for admission should offer as good teaching in the fundamental branches of anatomy, physiology, bacteriology, cliemistry, histology, materia medica, therapeutics, and in apecial branches, as these candidates themselves have received in Latin, mathematics, philosophy, German, and history in the undergraduate colleges. These schools, furthermore, should offer the sudent a fitting scholastic environment. The medical college should offer to him hospitals and clinics having many cases and unique, and the law school should put into his hands a properly equipped library.

For schools of medicine and of lav to offer the student such opportunities requires, primarily, money-and money, too, in large amounts. Professional education in this country has not yet received, with the exception of theological education, a fitting endowment. The theological schools of this country are now possessed of about $\$ 30,000,000$ of endowment, and the value of their buildings and grounds is about $\$ 12,000,000$. Be it said, a'so, that one-half of this amount is found vested in the theological seminaries of the North Atlantic States. Of the seminaries of the various churches the Presbyterian are the best endowed. About onefifth of the entire amount of endowment fruds of churches in America are found belonging to the Presbyterian Church. This endowment allows each professorship in these seminaries to have about $\$ 10,009$ in case there were an equal division of these funds. In the Congregational and Episcopal churches the endowment would be about $\$ 35,090$ for each chair. But the endowment of the medical and lave schoo's is so slight that one hesitates to give any figures at all. In fact, the endowment is so slight that some schools of law and of medicine are unwilling to reveal their poverty. The largest endowment in this country belongs to the medical school of Johns Hopkins University; the next largest is that of Harvard Medical School, and the next largest, so far as reported, is that of Western Reserve University Miedical College. In a recent year $\$ 1,500,000$ was given to endow professional education in this country, and of this sum 63 per cent was given to schools of theology, 17 per cent to schools of medicine, 14 per cent to schools of technology, and about 1 per cent to schools of law. For the improvement of professional education in medicine and law the American people must give of their wealth with a generosity akin to that with which they have poured out their millions each year to the undergraduate colleges. The great need of American life at the present time is better trained doctors and better trained lawyers. This need can be met only by the rich endowment of schoo's for the training of doctors and lawyers, for it is only such schools, well endowed and well equipped, that can worthily and fittingly ask men of a iiberal education to become their students. The next movement in the endowment of American education should be directed toward the schools of law and the sehools of medicine.

Washington University, Hedical Department. St. Louis. Mo.-"Early in the year 1890 the respective faculities of the St. Louis Medical College and the Missouri Medical College took certain preliminary steps looking to the union of these two institutions. With this end in view both faculties resigned. and in due course combined to form the medical department of Washington University."

Keolut Medical College and the College of Physicians and Surgeons, of Keokulk, Iowa, were consolidated in 1899.
Marion Sims Beaumont College of Medicine is the name of the institution formed by the consolidation of the two medical schools in St. Loais, Mo., May 1, 1901.

The State University of Iowa College of Medicine has decided to extend the course to four years of nine months each, the length of the session to be thirty-eight weeks, or thirty-six weeks exclusive of vacations.

A GiFT to RUSH MEDICAL COLLEGE.
The Journal of the American Medical Association (November 10, 1900) says:
Friends of high standards in medicine will rejoice to learn that Dr. N. Senn has given 350,000 to Rush Medical College for building purposes. This is not his first gift to medicine. A few years ago he gave to the Newberry Library, of Chicago, a unique and remarkable collection of medical books-that of Baum and Du BoisReymond. When Rush College became affliated with the University of Chicago, he contributed $\$ 25,000$ toward wiping out the debt of the college, and only the other day a gift of $\$ 10,000$ was announced to St. Joseph's Hospital, in which Dr. Senn for years has done a large share of his private work. This makes a substantial return to the profession, in which but few acquire abundance of worldy estate. It is given only to few to further the medical weal as Dr. Senn is doing. The example is one that others will do well to follow, and it is to be hoped that this
gift of $\$ 50,000$ may mark the beginning of a series of endowments in the interest of higher education in medicine.
The foremost medical colleges in Chicago have received, up to this time, far less endowment than similar institutions of relatively the same standing in some other large cities. And large sums of money are necessary in order to build up these schools according to the high standards they have set for their work. Since its affiliation with the University of Chicago the career of Rush Medical College has been followed with great interest. By the introduction of the quarterly system and of elective methods of study it became a pioneer in revolation of the medical curriculum. Dr. Senn's gift will enable the college to meet one of the most crying needs at the present time, namely, more room and better facilities for clinical instruction.
The gradual development in various parts of the United States of medical schools with high scientizc standards, adequate equipment, and proper methods is a better foretoken than anything else of a great future for medicine in this country. The history of the Johns Hopkins Medical School, of which every American may be proud, demonstrates that American soil is favorable for the growth of scientific medicine and not merely a hotbed for medical commercialism. The infuences constantly going out from the medical schools of the large universities in New York, Boston, Philadelphia, Chicago, Ann Arbor, San Francisco, and elsewhere are powerful factors in the interests of higher medical standards. And there are other well-established institutions with their own hospitals-as in Philadelphia-working toward the same end. But the fact remains that the present number of medical schools in this country-156 or thereaboats-is excessive and abnormal. And what is abnormal must be subjected to active remediol measures, and not, as suggestel in a recent presidential address, allowed to drag along until eventually eliminated by a kind of natural selection. One reason for the existence of poor schools is that their graduates as yet have comparatively little difficulty in obtaining the right to practice. The State examinafions must be made more searching than now. And the character of the work of schools, graduation from which entitles to come up for State examination, must be accurately controlled. Heretofore such matters have been dealt with in only the most general terms.

The facilities for practical clinical instruction demand careful investigation and specification. Too few medical schools have their own hospitals. This is true of some of our most progressive institutions. A most essential part of the work of the medical school is practical instruction and training in medicine and surgery, and how can this be accomplished properly and in accord with modern pedagogic methods unless the schools have the necessary laboratory and other equipments, and also have full and absolnte control of adequate hospital facilities? Large endowments are necessary for the establishment of well-equipped institutions and hospitals in which to teacih and study medicine. May not euch endowments be expected when it begins to be understood what the good medical school is trying to do? Gifts like Dr. Senn's, therefore, will do much to interest the public in these matters and to open its eyes to the magnitude of the work in hand.

Yale Medical School, New Haven, has received an anonymous donation of $\$ 100,000$, which is to be applied to the construction of a clinical building-a laboratory of clinical medicine and surgery. ${ }^{1}$

Four years in dentistry in the University of Michigan. ${ }^{2}$-The board of regents at a meeting held May 17, 1900, authorized the dental faculty to provide a curriculum for a four years' course in dentistry in place of the present three years' course, to be inaugurated with the session beginning in 1901, and aiso, at the same time, to make the educational requirements for admission to the dental course a diploma from an accredited high school or other school of similar standing, or the equivalent of either in examination.

Four years in dentistry at Tufts College.-The faculty of the Tufts Colloge Dental School, at its last meeting, passed a unanimous vote to extend the course in that school to four years, the change to apply to all students entering the school in 1902 and thereafter. ${ }^{3}$

Board of Law Examiners in Iowa. - According to an act approved April 16, 1900, "The attorney-general shall, by virtue of his office, be a member ore and the chairman of the commission provided for by the chapter of the code above referred to as amended by this act, and the court shall appoint from the members of the bar
of this State at least four other persons, who, with the attorney-general, shall constitute said coinmission, and which shall be known as the Board of Law Examiners. Of the persons first appointed as commissioners, two shall be designated by the court to serve for one year; the remaining members shall serve for two years." Each applicant for admission to the bar must pay an examination fee of $\$ 5$ and must have " acquired a general education substantially equivalent to that involved in the completion of a high-school course of study of at least three years in extent."

Board of Lav Examiners in Rhode Island.-A permanent board of State bar examiners has been appointed, consisting of five members. The full term of service for which a member of said board is appointed is five years. The term of office of one member expires each year. ${ }^{1}$

In West Virgiaia "all applicants for admission to the bar are reauired to pass an examination before the law faculty of the State University. If they pass, a certificate of the fact is given and on that the supreme court of appeals grants a license to practice law. The system works well."

In Arkansas "the State Bar Association at its last two sessions has taken a bold stand in recommending that the requirements in the future be more exacting, and such examinations of the various applicants be given as will thoroughly test their qualifications as to knowledge of the law and moral standing."

Increased number of law sindents. -In regard to the increase in the number of law students Frankiin M. Danaher, secretary of the New York Board of Examiners, says: ${ }^{2}$
The law schools have doubled the number of their students in five years, and the question has been asked why they are increasing so rapidly. I have studied that question very carefully and have come to the conclusion that it is due to the general raising of the standard of education among the students theinselves; they know that under existing conditions a thorough education in the law can not be obtained in a law office; they also feel, at least in our State, that under the system of examinations established by the State board, it is almost impossible to qualify unless they are fully prepared, and they know that they can not get adequate preparation outside of a law school.

Seventy per cent of the applicants in the State of New York have had some lawschool training. We find that the men who come from law schools are twice as well qualified nearly, as those who apply from law offices. Fourteen per cent fail who have had low-school training, while 26 per cent fail who come to the examinations from the law office solely.

## FRAUDULENT DIPLOMAS.

The Commissionor of Education, in his Report for 1898-89, page 1681, called attention to the traffic in fraudulent diplomas, the chief offender being the Independent Medical College of Chicago, also known as the Metropolitan Medical College. At the time that Report went to press the officers of the institution had been placed under arrest but not brought to trial. The result, however, has since been amounced by the Journal of the American Medical Association (December 22, 1900), which states that "the president of the 'diploma mill,' whose latest name was Motropolitan Medical College, was sentenced on December 15 to serve one year in the Dupage County jail and to pay a fine of $\$ 500$. Sentence on the other two defendants was deferred until the next term of court."

The Dental Cosmos, July 1900, says:
Hlinois has long possessed a vicious law under which it was possible for irresponsible men to obtain charters for colleges authorized to confer degrees. This has made Chicago the headquarters for all the degree-selling colleges of the country. The matter was first publicly ventilated in the report of the committee on foreign relations of the National Association of Dental Facuities, at the annual meeting held two years ago in Omaha. This report was a scathing denunciation of the law, which it pronounced a disgrace to the State. The committee was continued by the National Association, and they were authorized to expend such sums of money as were necessary in the further prosecution of the investigation.

The report aroused a great deal of feeling among the educators of tho State, and a meeting of representatives of the various degree-granting literary institutions was called and a committee was appointed, consisting of Presidents Harper, of Chicago University; Rogers, of Northwestern; and McClure, of Lake Forest, to memorialize the legislature, and to endeavor to place the educational affairs of Illinois on a better basis. The report of the foreign relations committee was widely circulated. It was presented before the legislature, and extracts from it were printed in circulars and in the newspapers.
The efforts or the committee failed, but the counsel of the foreign relations committee introduced another bill, which becams a law, authorizing the annulling of the charters of any colleges which grantel degrees improperly. The Illinois Stato Boarl of Health was already at work toward the same end, and the foreign relations committee joined forces with that body. The conseguence has been that the conductors of the "Independent Mfedical College of Chicago," which has adiertised openly in the newspapers that it would furnish diplomas for a consideration, have at last beon caught and brought to book. It was found when they were arrested that they wero in possession of twenty-iour different charters, so that when one was annulled. they could immediately operate under another.

These men are now in jail, and it is hoped that the worst of the frandulent colleges is broken up, and that its fate will deter others. It is believed that this institution has sold in this country and in Europe more than a thousand diplomas.

The Dental Cosmos, April, 1901, under the heading, "The status of the American dental degree in Germany," says:

The Muenchener Neueste Nachrichten, of February 6, publishes an account of the arrest and trialof a dentist, Emil Gumpoldt, for advertising limself as "Amerikanischer Zahnarzt" upon the authority of a certificate of the dental examining: board of the State of Illinois. He was the holder also of a diploma which, it is charged, was issued by a fraudulent diploma, concern in Chicago.

The case enlisted the interest of the Hon. James H, Worman, United States consul at Munich, who has instituted activemeasures toward protecting the dignity and reputability of the American dental degree as conferred by legitimate American schools. We append certain correspondence relating to the matter which wiil clearly show the active steps which are being taken to rectify the harmful effects of the illicit diphoma trafic, and to secure proper credit for the legitimate dental degree.

Conselate of the United States of Anerici,
Munich, Germany, December 29, 1900.
Hon. David J. Hill, etc.:
Sir: Referring most respectfully to my unnumbered dispatch of April 21, 1900, upon the subject of American dental degrees in Germany, to which I was honored with a roply by your Department under date of July 17, 1900, No. 30, I have the honor most respectfully to report at this time:

1. That I have since placed inyself in re'ation with the organized associations of American dencal graduates in southern Gernany, and, in connection with the learned counsel of this consulate, have advised them. how to conduct themsel res in their relations with the Government and press, and in the derense of those of their members who have been or are being prosecuted for what is termed here an "unlawful" use of their honestly acquired titles of D. D. S.
2. That at the same time in all cases, whether of gentlemen holding legitimate diplomas or of persons holding illegal issues, I have beon in constant communication with the Bavarian department of justice and the foreign office to protect the rights of all legitimate ho'ders of such American degrees, correctly issued, to use and advertise their degrees, and to secure the prosecution and conviction of those illesally holding American certificates or honors.

My task has been a peculiarly difficult and delicate one, as there is, in the first place, even among elucated and intelligent Germans, a misconception of the character of American universities and especially the schools of dentistry, on account of many of them being, as far as their original organization is concerned, in form at least, private concerns: and among the less informed a strong prejudice against American degrees on this account. It has, therefore, been a matter of propsganda to bring the authorities to understand that under the republican forms of government existing in the several States, where so much is necessarily left to private initiative, these institutions, although in form private enterprises, by virtue of their charters and the right of visitation and control by the State authorities, are, in fact, public institutions.

Another difficulty lies in the fact that the German universities, stimulated by the reputation and success of American dental colloges, have added dental depari-
ments to their curricula, which in theory, at least, are not inferior to the average American institutions; and, among others, the University of Munich has recently established such a department, which, in equipment and the character of its instruction, will prove inferior to no other.

The purpose of this instruction in dentistry at the German universities is to offer to Germans the opnortunity of educating themselves thoroughly in that art, and to raiss the estimation of German dental degrees to the American standard, so as to induce students to remain at home.

It is casy to comprehend how this jealousy of American degrees finds its expression, not only among prejudiced people, but also among holders of German dental degrees, in denunciation of American degrees and dental institutions, and also in their efiorts to bring about a prohibition of their use in Germany.

I have good reason to believe that I have met these difficulties successfully and have been able to convince the authorities here of the value of legitimate American university honoris and the titles of technical schools, and of the expediency of not prohiliting them; also of the sincere desire of the United States Government to do everything possible to prevent the issue of worthess diplomas and to effect the closing of institutions issuing them.

Iry main endeavor has been to secure such evicence as might be of service in proceedings against the institutions issuing ilegitimate diphomas, and I have already obtained possession of original diplomas and certificates in two instances where they were purchased in America by Germans against whom proceedings are now pending.

In one of these cases I have had the diplomes copied by photography and typewritten copies of the certificates made. I have applied to the legal authorities to have the original dip'omas and certificates in these cases delivered to me for transmission to the State Department, for use as evidence in any proceedings it may be deemed expedient to institute, and, though such a course is difficult to effect, I hope tor a favorabie answer.

On December 10, 1800, a very interesting case was settied in the courts of Munich against one Samuel Gumpo'dt, once a "Zahntechniker," now a full-fledged "American dentist," claming also to be the holder of the American degree of doctor of dental surgery. He o tained the "doctorate" at one of those nonreputable dental schoo's oñ which two remain to be suppressed in Chicago. "Dr." Gumpoldt weat to America some time last spring, remained a few weeks in Chicago, and came back with a certificate from the "State board of dontal examiners" permitting him to practice dentistry in Illinois. Thestates attorney here made the polite request that I should testify as an expert in the case in order to establish the illegality of the defendants claim, and as a result the "doctor" was condemned for terming himself "Amerikenischer Zahnarzt" and leavily fined. The case, of course, will be appealed, but it is to be hoped that the governor of Illinois will cause an inquiry into the illegal practice prevailing in that Stato by issuing such certificates as in this instance, es the State board is only expected to admit to examination a candidate who has spent at least six months in a regular dental school. In this instance the "doctor" made ce:ta'n claims as to studies in Rcumania. * * *

Another case now in the courts is affording me the opportonity to secure by the aid of photography the needful evidence to convict of such illegal practice the other now remaining nonreputable institution in Illinois making a business of the sale of diplomas, and I shall have the honor to submit this report by an early post.
The rapidy growing tendency among the peoples of the (ferman Empire to bar out as fiar as possible all foreign competition may, as I have already suggested, force the governments of the various States to a more determined warfare in behalf of the dentists educated in the schoo's of Germany only, against those bearing the distinctive honors of the American dental schools, thus ultimately affecting not only the good standing of American dentists abroad, but also destroying their usefulness it not barring them altogether. It is to be hoped, therefore, that the course taken by this consulate, however great the sacrifice in labor and time, may prove both timely and judicious, maintain the integrity of our worthy schools of dentistry, and preserve them in honor abroad as well as at home.

To this end I would most respectfully ask you whether you do not deem it expedient that publicity be given through the press in America to such institutions, and in Germany to punish persons holding and advertising their diplomas, in order to deter foreigners from purchasing such titles, and thereby to destroy the market for them? I have abstained entirely from any communications whatever to the press, but believe that the widest publicity should be given the whole subject.

I have the honor, etc.,
James H. Worman, Uniteil Staies Consul.

A new dental regutation in Germany. ${ }^{1}$ - The royal chief ofice of police has published under date of February 20, 1901, the following announcement in the newspapers:
"According to verdicts of the high courts of appeal, all persons who, without having graduated in Germany, style themselves Arzt, Wundarzt, Augenarzt, Geburtshelfer, Zahnarzt, Nervenarzt, Naturarzt, etc., or use any title containing the word 'Arzt,' are trespassers against the law. Also the culpability is not, exciuded by additions, as for instance, 'graduated abroad,' 'not graduated,' etc., which are intended to show that the person in question has not obtained approbation by license in Germany. Such persons may expect the same prosecution as those who style themselves in such a manner as to make people believe that the holder of the title has passed an official medical examination; and it is immaterial as to whether such person has so styled himself hitherto without being prosecuted."

Herewith the cquestion again arises whether the titles "in Imerika approbirter Zahnarzt" or "amerikanischer Zahnarzt" are a misdemeanor against section 143 (I. G. O.), Trade Regulations of the Empire, and are again threatened with prosecution. According to the verdicts of the Berlin Kammergericht (court of appeal) the question of the culpability of the one styling himself "Zalnnarat," with explanatory addition or without, whenever such person nses it, not having graduated from a German university, must be finally confirmed.

After the Landes Central Behorrden of the German Empire havo made the use of a foreign title in future, as doctor, etc., dependent upon special permission, thero has now been submitted by the home office of the Empire the draft of a decree to tho competent committee of the Bundesrath, in accordance with which the further us? of foreign titles, which hitherto have not been objected to, is forbidden, if the same have been accuired under conditions less stringent than they can be acquired in Germany. All American tities will be forbidden as soon as this decree is sanctioned.
Sosieties belonging to the mion of German Zahnkünstler have proposed a priVate examination of their members and the bestowing upon them of a diploma as "examined dentist," but it is asserted that the Central Dehörden intend taking energetic measures against this new styling of those who have not graduated from German universities, as soon as some one publicly makes use of this title, as a punishable contravention of the law is seen in it. The only perscns allowed to style themselves "examined" are those who have passed an examination before a state commission, or a commission which has been authorised by the state authorities. The styling " dentist" is forbidden as well, because in other cultivated countries by the term "dentist" is understood a person duly licensed by the authorities (authorized) to practice dentistry.

Table 1.-General summary of statistics of professional and allied schools, for 1890-1000.

| Class of schools. | Schools. | Instructors. | Students. |  | rease <br> or de- <br> se (一). | Grady | ated | Per cen graduated. | Studonts having A. B. or B. S. ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Theological. | 154 | 994 | 38,009 |  | - 250 |  | 13 |  | 38 |
| Law. | 96 | 1,004 | ${ }^{4} 12.516$ |  | + 642 |  | 241 |  | 2,1 |
| Medical | 151 | 4,483 | 25,213 |  | +1,435 |  | 219 |  | 2,4 |
| Dental ------- | 54 | 1,118 | 7,928 |  | + 574 |  |  |  |  |
| Pharmaceutical | 53 | 493 | 4, 040 |  | + 491 |  | 130 |  |  |
| Veterinary | 13 432 | 185 | 11,104 |  | 46 $+1,146$ |  | 109 54 |  |  |
| Class of schools. |  |  | Value of grounds and buildings. ${ }^{2}$ |  | Endowment funds. ${ }^{2}$ |  | Benefacticns receiven in 1900. |  | Volumes in libraries. |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Theological <br> Law <br> Medical <br> Dental <br> Pharmacentical <br> Veterinary <br> Nurse trainiug |  |  | $\begin{array}{r} \$ 1,101,214 \\ 1,498,000 \\ 12,464,477 \\ 1,276,500 \\ 791,04 \\ 375,000 \\ 5 \sim 1,549,043 \end{array}$ |  | $\begin{array}{r} \$ 19,979,565 \\ 567,900 \\ 2,238,087 \\ 105,009 \\ 19,202 \\ 5,054 \\ 518,381,130 \end{array}$ |  | $\begin{array}{r} 81,123,802 \\ 107,500 \\ 49,239 \\ 1500 \\ 4,700 \\ 51,000 \\ 51,834,432 \end{array}$ |  | 1,$\begin{array}{r} , 58,901 \\ 327,019 \\ 108,461 \\ 6,581 \\ 33,719 \\ 1,000 \end{array}$ |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

[^113]TAbie 2.-Comparative statistics of professional and allied schools.

| Class. | 1870. | $18 \% 5$. | 1880. | 1885. | 1890. | 1895. | 190 . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Theology: |  |  |  |  |  |  |  |
| Schools .- <br> Students. | $3,80$ | $\begin{array}{r} 123 \\ 5,234 \end{array}$ | $\begin{aligned} & 142 \pi \\ & 5,242 \end{aligned}$ | $\begin{array}{r} 152 \\ 5,775 \end{array}$ | 7 7145 |  |  |
| Graduates |  | 782 | ${ }^{\text {\% }} 19$ | \%90 | 1,3\%2 | 1,598 | 1, \%3 |
| LaT: |  |  |  |  |  |  |  |
| Schools - | 1, $\frac{2}{8}$ | ${ }^{43}$ |  |  | 51 | 72 | 12. 56 |
| Students.- |  | 2, 6 \% 7 | 3, 134 | 2, 744 | 4, 518 | 8,950 | 1,2.615 |
| Graduates |  | 823 |  | 744 | 1,424 | $\stackrel{\sim}{2}, 617$ | $3,2 \pm 1$ |
| Medicine (all classes): |  |  |  |  |  |  |  |
| Schools. Students |  |  |  | 11. 118 | 15. 129 |  | 25.213 |
| Students. Graduates | 6,191 | $\stackrel{8,580}{2,891}$ | 11,329 | 11,099 3,622 | 15,484 4,556 | 21,334 $4,8.27$ | 2. 2.813 |
| Medicine (regular): |  |  |  |  |  |  |  |
| Schools. |  | 65 | 12 | 88 | 93 | 113 | 121 |
| Students | 5,670 | \%,518 | 9, $8 \% 6$ | 9,441 | 13, 521 | 18, 650 | 22, 102 |
| Graduates |  | 2,083 | 2,063 | 3,113 | 3,803 | 4,106 | 4, 2.20 |
| Miedicine (homeopathic): ${ }_{\text {N }}$ |  |  |  |  |  |  |  |
| Students | $2 \%$ | 664 | 1,2\%0 | 1,088 | 1,164 | 1,8\%5 | 1,909 |
| Graduates |  | 168 | 350 | 342 | 280 | $4 \mathrm{C3}$ | 413 |
| Dentistry: |  |  |  |  |  |  |  |
| Schools - |  | $1 \%$ | 16 | 18 | 278 | 45 | 5 |
| Students. | 4 | 469 | 730 | 1,116 | 2,693' | 5,3i7 | \%,983 |
| Phamaduate |  | 151 | 206 | 458 | $9 \times 3$ | 1,297 | 2,029 |
|  |  |  |  |  |  |  |  |
| Students | 512 | 922 | 1,3+7 | 1,746 | 2,871 | 3,839 | 4, 642 |
| Graduate |  | 203 | 186 | 396 | 729 | 1,06\% | 1,130 |
|  |  |  |  |  |  |  |  |
| Stadents |  |  |  |  | $4{ }^{7} 3$ | 4.9 |  |
| $\begin{aligned} & \text { Students.- } \\ & \text { Graduate } \end{aligned}$ |  |  |  |  | 433 | $\pm 1$ | 103 |
| Nurse training: |  |  |  |  |  |  |  |
| Schools .-... |  |  |  | 34 | 35 | 131 |  |
| Students |  |  | $3 \% 3$ | 793 | 1,55. | 3.985 | 11,161 |
| Gracuates |  |  | 157 | 218 | 471 | 1,498 | 3,253 |

TABL 3.-.-.Srmmary of statistics of schools of theology for 1899-1900.

Tadle 4．－Summary of siatistics of schools of law for 1892－1300．

| States． | Schools． | $\begin{aligned} & \text { Plofess- } \\ & \text { or's. } \end{aligned}$ | Special or assist ant in－ struct－ O2＇s． | Stucients． |  |  |  | Total in－ come of schools．a | Value of grouncis and buildings． | Endow－ <br> ment <br> funds．a | Benefac－ tions $1 \cdot \mathrm{e}-$ ceived during the year． | $\begin{aligned} & \text { Volumes } \\ & \text { in } \\ & \text { librarios. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Men． | Women． | $\begin{aligned} & \text { Gradu- } \\ & \text { atedin } \\ & 19(\omega . \end{aligned}$ | Stadents having A．B．or B．S．a |  |  |  |  |  |
| United States | Bj | 580 | 424 | 12，365 | 1.1 | 3，241 | 2，166 | \＄48\％， 293 | \＄1，498，000 | S30\％， 900 | \＄105，500 | $3 \stackrel{\sim}{\sim}{ }^{\prime}, 019$ |
| North Atlantic Division | 16 | 134 | 128 | 4，189 | 46 | 911 | 1，209 | 200， 849 | 897，009 | 81，600 |  | 158， 877 |
| South Atlantic Division | \％1 | 102 | 35 | 1，788 | 18 | 411 | 148 | 46，904 | 10：2，000 | 220，900 | 100，500 | 215，759 |
| South Central Division－ | 18 | 134 | 46 | － 718 |  | ， 310 | 113 | 111，100 | \％ 80,000 |  |  | 15，8．0 |
| North Central Division | $3 \frac{1}{w}$ | 240 | 187 | 5，500 | 73 | 1，540 | 617 | 113,639 | $3 \% 9,000$ | 125， 000 | 5，000 | $1 \approx 0,632$ |
| Western Division ．－．．．－ | r | 41. | 28 | 436 | 14 | 49 | 89 | 14，841 | 50，000 | 135，000 |  |  |
| North Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine－r－－－－－－－－－ | $\frac{1}{2}$ | $\begin{array}{r}3 \\ 34 \\ \hline\end{array}$ | 14 | 1，019 | 1 | $\begin{array}{r}26 \\ 8.85 \\ \hline 20\end{array}$ | 888 |  | 205，000 | 1，080 | －－－－－－－－－－－－－－－－－－ | 2,500 68,000 |
| Rhode Island | I | 14 | 0 | 1，58 |  |  | 5 |  | いいロ， | 1，00 |  |  |
| Connecticut | 1 | 10 | $\because 0$ | 195 |  | 45 | 63 |  |  | 75， 000 |  | 12，000 |
| New York | 7 | 43 | 74 | 2，316 | 33 | 493 | 560 | 152， 919 | 172，000 | 5，000 | －－－－－－－－－－ | 55， $37 \%$ |
| Pennsylvania | 4 | 30 | 13 | 559 | 6 | $1 \geqslant \%$ | 53 | 47，800 | 500， 000 |  |  | 25，000 |
| South Atlantic İvision： |  |  |  |  |  | 58 |  |  |  |  |  | 750 |
| Marylanderictor－－－－－－ | $\stackrel{3}{6}$ | $\tilde{4}_{4}$ | 25 | 308 742 | 15 | 188 | 49 | 23，209 | 52，000 | 100，000 |  | \＆，540 |
| Virginia | 3 | 10 | 3 | 275 |  | 60 | 56 | 19，145 | 50，000 | 126，900 | 100，500 | 7，850 |
| West Virginia | 1 | 3 | 0 | 124 | 1 | 23 | 5 |  |  |  |  | 400 |
| North Carolina | 3 | 7 | ］ | 170 |  | 8 | 10 | 817 |  | －．．－－－－．．．． |  | 760 |
| South Carolina | 1 | 1 |  | \％8 |  | 12 |  |  |  |  | －－－－－－－－－ | 2,000 |
| Georgia．．． | 4 | 12 | 4 | 81 |  | （i3） |  |  |  |  |  | 500 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 3 | 8 | ${ }_{81}^{4}$ | $9{ }^{9}$ |  | 48 | 5 | 4，500 | 50，000 | －－－－－－－－ |  | 300 |
| Tennessee ． | 8 | 31 | 31 | 216 |  | 109 | 34 | 105，600 | 20， 000 | －．．．－－ |  | 8， 100 |
| Alabama．－ | 1 | $\stackrel{\sim}{\sim}$ |  | 51 |  | $\because 8$ | 12 |  |  |  |  | 1，500 |
| Mississippi | 2 | 5 | 4 | 79 |  | 38 | 1～ |  |  |  |  | 1，450 |
| Louisiana． | 1 | 5 |  | \％） |  | 30 |  |  |  |  |  |  |
| Texas－－． | 2 | \％ | 3 | 181 |  | 51 | 40 |  |  |  |  | 4，500 |
| Arkansas | 1 | 6 | 4 | 18 |  | 6 | 10 |  |  |  |  |  |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio－－ | 5 | 47 | 5 | 609 | 7 | 171 | 114 | 13，200 | 60， 000 | －－－－－－－－－－ | 500 | 19，934 |
| Indiana－ | 5 | $3)$ | \％ | $5 \% 0$ | 6 | 100 | 40 | 19，919 | 3，000 | －－－－－－－－－－ |  | 9， 6000 |
| Illinois－－ | 10 | 78 | 56 | 1，140 | $\because 8$ | 331 | 117 | 16，000 |  |  |  | 1，003 |
| Michigan－ | 2 | 31 | 16 | 1，035 | ${ }_{1}^{6}$ | 266 | 130 | 9，614 | 80，000 | 27，500 | －－－－－－－－－－ | 27.000 |
| Wisconsin | 1 | E | 1 | 229 | 1 | 66 | 5.4 |  | 86.000 80 | 20，000 |  | 5,000 8,009 |
| Nimnesota | 1 | 15 | 18 | 480 | （3） | 121 | 21 | 20，000 | 60，000 |  |  | 14，150 |
| Missouri | 3 | 16 | 0 | 398 | 3 | 114 | 60 | 29，906 | 100，000 | 7\％，500 |  | 25， 000 |


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|  | + +--20 |
| $\underset{\sim}{\infty} \underset{\sim}{\infty} \underset{\sim}{\infty}$ | + $¢$ |


I'able 5.-Summary of statistics of schools of medicine for 1899-1900.


Table 6.-Summary of statistics of schools of dentistry for 1890-1900.

| States. | Schools. | Professors. | Special or assist-antin-structors. | Students. |  |  |  | $\begin{gathered} \text { Value of } \\ \text { grounds and } \\ \text { buildings. } \end{gathered}$ | Endowment funds. | Benefactions received during the year. | Total income or schools. | Volumes in library. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Men. | Women. | Gxaduated in 1900. | Having A. B. or B. S. degree. |  |  |  |  |  |
| United States | 54 | 569 | 549 | 7,768 | 160 | 2,0:9 | 19: | \$1,276,500 | \$105, 000 | \$500 | S:98,506 | 6, 533 |
| North Atlantic Division | 10 | 9:2 | 181 | 2,363 | 49 | 597 | 19 | 600,000 | 80,000 | 500 | 119,394 | 2,010 |
| South Atlantic Division | 10 | 90 | 83 | 970 | 7 | $\because 64$ | 84 | 85,000 | 9,000 |  |  | 300 |
| South Central Division | ${ }^{6}$ | 57 | 51 | 471 | 5 | 125 | 21 | (66,009 |  |  | 33, 800 |  |
| North Central Division | 21 | 246 | 169 | 3, 429 | 81 | 932 | 63 | 410,500 | 16,000 |  | 131,650 | 4,201 |
| Western Division .....-. | 7 | 84 | 65 | 335 | 18 | 111 | 5 | 115, 010 |  |  | 13,86: |  |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Massachusetts....... | 2 | 27 | 54 | 291 | 5 | 77 | 4 |  | 80,000 | 500 | 48, 000 | 510 |
| New York .-.. | 3 | 23 | 64 | $59 \pm$ | 13 | 67 | 4 | 170,060 |  |  | 52, 394 |  |
| Pennsylvania --....... | 5 | 42 | 63 | 1,478 | 31 | 453 | 11 | 430, 000 |  |  | 19,000 | 1,500 |
| South Atlantic Division: Maryland | 8 |  | 43 | 524 |  |  | 57 |  |  |  |  |  |
| District of Columbia | 3 | 29 | 18 | 134 | 2 | 21 | 27 |  |  |  |  |  |
| Virginia | \% | 19 | 11 | 56 |  | 11 |  | 65,000 |  |  |  |  |
| Georgia | 2 | 1.6 | 11 | ? 3 it | 0 | 75 |  | 20,000 | 9,000 |  |  | 300 |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | $\frac{1}{3}$ | 18 | 10 <br> 17 <br> 18 | 140 858 | 0 4 4 | 45 | 18 | 40,000 26,060 |  | -...--...... | 17,000 13,000 |  |
| Alabama. | 1 | $i$ | 13 | 41 |  | 10 | 3 |  |  |  |  |  |
| Louisiana | 1 | 7 | 11 | 3: | 1 | 3 |  |  |  |  | 3,600 |  |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Ondiana --. |  | 40 | 14 | 545 | $1 \stackrel{\sim}{\sim}$ | 166 | 11 | 98.000 | 11,000 | -------- | 15,000 | 800 |
| Illinois.- | 3 | 39 | 41 | 1,2025 | 29 | 818 | 25 | 30,00 |  |  | 33,500 |  |
| Michigan | , | 19 | 15 | 356 | 11 | 99 | 6 | 85,000 |  |  | 30,000 | '600 |
| Wisconsin | 1 | 11 | 8 | 153 |  | 35 |  | 150,000 |  |  |  | 500 |
| Minnesota | , | 11 | 5 | 126 |  | 36 |  |  |  |  | 12,000 |  |
| Miowa -..- | 3 | \%3 | 9 | 178 | 10 | 139 | 5 | 30,000 |  |  | 19,650 | 321 |
| Missouri. | 4 | 51 | 5 | 496 | 12 | 114 | 2 | 12, 500 |  |  | 21,500 |  |
| Western Division: | \% | 2.2 | 13 | 13 | $\underset{\sim}{2}$ | 10 | 11 |  | 5,000 |  |  |  |
| Colorado.- |  | $\because 6$ | 18 | 76 |  | 22 |  |  |  |  | 3,86:2 |  |
| Oregon-- | 1 | 13 | 4 | 73 | $\stackrel{2}{1}$ | 5 |  |  |  |  | 10,000 |  |
| California | 4 | 45 | 43 | 386 | 11 | 84 | 5 | 115,000 |  |  |  |  |

TABLE 7.-Summary of statistics of schools of pharmacy for 1899-1900.

| States. | Schools. | Professors. | Special or assistant in-structors. | Students. |  |  |  | Valae of grounds and buildings. | Endowment funds. | Benefactions received during the year. | Total income of schools. | Volumes in library. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Men. | Women. | Graduated in 1900. | Having A. B. or B. S. degree. |  |  |  |  |  |
| United States. | 53 | 278 | - 215 | 3,846 | 196 | 1,130 | 51 | \$791.012 | \$19, $20 \sim$ | \$1, \%00 | 369, 11\% | 33, 719 |
| North Atlantic Division | 10 | 58 | 62 | 1,37\% | 58 | 338 | 3 | 468,5积 | 19,202 |  | 36,891 | 23,619 |
| Scuth Atlantic Division | 9 | 34 | 21 | 302 | 5 | 104 | 3 | 37,500 |  |  | 4,196 | -350 |
| South Central Division | 9 | 31 | 12 | ${ }^{269}$ | 17. | 58 | 17 | 20,000 |  |  | - 830 | 660 |
| North Central Division | 21 | 136 | 100 | 1, 746 | 96 | 58.2 | 26 | 145,000 |  | 200 | 17,700 | 8,850 |
| Western Division .-..... | 4 | 19 | 20 | 157 | 20 | 48 | 2 | 120,000 |  | 1, 500 | 9,500 | 8, 300 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1 | $1 \underset{\text { ² }}{ }$ | $\stackrel{9}{7}$ | 17. | 12 | 19 | 0 <br> 3 | 69,300 | 14,215 |  | 4,841 | 132 |
| New York | 4 | 21 | 27 | 598 | 25 | 164 |  | 201,212 | 4,987 |  | 11, 550 | 6,587 |
| New Jersey | 1 |  | 3 | 2 | $\stackrel{2}{19}$ | 8 | 0 |  |  |  | 3,000 |  |
| Pennsylvania | 3 | 15 | 16 | 570 | 19 | 144 |  | 195, 000 |  |  | 7, 200 | 11,900 |
| South Atiantic Division: <br> Maryland | 1 | 4 |  | 98 |  | 4. |  | 20,000 |  |  |  |  |
| District of Columbia | $\stackrel{1}{2}$ | 8 | $\stackrel{3}{5}$ | 80 | 4 | ${ }_{21} 1$ | 2 | 15,000 |  |  | 3,500 | 350 |
| Virginia ... | 2 | 9 | 8 | 32 | 1 | 10 | 1 |  |  |  |  |  |
| North Carolina | $\underset{\sim}{2}$ | 7 | $\stackrel{\sim}{2}$ | 30 |  | 7 |  | 2,500 | ------------- | --- | 696 | --...----.-. |
| South Carolina | 1 | 4 | $\stackrel{2}{2}$ | 28 |  | 11 |  |  |  |  |  |  |
| Georgia --... | 1 | 2 | 2 | 34 |  | 5 |  |  |  |  |  |  |
| South Central Division: |  |  |  |  |  |  |  |  | - ----- |  |  |  |
| Kentucky- | 1 | 8 |  | 47 | 0 | 8 | 15 | 20,000 |  |  |  | 600 |
| Tennessee | 3 | $1 \%$ | 5 | 58 | 7 | 12 | $\stackrel{2}{2}$ |  |  |  | 830 |  |
| Alabama. | $\stackrel{\sim}{1}$ | 4 | $\stackrel{\sim}{8}$ | 54 | 0 | 7 | 0 |  |  |  |  |  |
| Louisiana | 1 | 3 | 3 | $\because 8$ | 3 | 9 |  |  |  |  |  |  |
| Texas ...... | 1 | 3 | 1 | 41 | 4 | 11 | 0 |  |  |  |  |  |
| Oklahoma | 1 | 1 | 1 | 41 | 3 | 11 | 0 |  |  |  |  |  |
| North Central Division: Ohio. |  |  |  |  |  |  |  |  |  |  |  |  |
| Indiana | 3 | 16 | 11 | 201 | 10 | 107 | 4 | コ5,000 |  | 200 | 6,700 | 1,500 |
| Illinois . | $\stackrel{2}{2}$ | 10 | 6 | 371 | 13 | 58 | 1 | 75,000 |  |  | 11,000 | 2,350 |
| Michigan | 2 | 16 | 8 | 112 | 13 | 49 |  |  |  |  |  | 5,000 |
| Wisconsin | 1 | 20 | 10 | 46 | 5 | 12 | 3 |  |  |  |  |  |
| Minnesota | 1 | 7 | ¢ | 57 | 7 | $1 \%$ | 9 |  |  |  |  |  |
| Iowa. | 3 | 18 | 15 | 335 | 34 | 116 | 5 |  |  |  |  |  |
| Missouri | $\stackrel{\sim}{1}$ | 11 | 9 | $18 \%$ | 5 | 8 |  | 35, 060 |  |  |  |  |
| South Dakota | 1 | 4 |  | 25 | 0 | 8 |  |  |  |  |  |  |
| Western Division: | 1 | 6 | 6 | 75 | 4 | 21 |  |  |  |  |  |  |
| Western Division: Washington | 1 |  |  | 18 |  | 2 | 0 |  |  |  |  |  |
| Oregon.- | 1 | 7 | $\stackrel{\sim}{5}$ | 33 | 13 | 2 | 0 |  |  |  |  |  |
| California | 2 | 8 | 13 | 106 | 6 | 44 | 2 | 120,000 |  | 1,500 | 9,500 | 300 |

Table 8.-Summary of stai istics of schools for training murses, for 1899-1900.

$a$ For hospitals for the insane the number of inmates is given.

Tablis 8.-Summary of statistics of schools for training nurses, for 1899-1900Continued.

| States. |  | Nurse pupils. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 寻 | $\begin{aligned} & \text { ह̈ं } \\ & \text { g } \\ & \text { B } \end{aligned}$ |  |  |  |  |  |  |  |
| CLASS B-continued. |  |  |  |  |  |  |  |  |  |  |
| Hospitals for the insaneContinued. |  |  |  |  |  |  |  |  |  |  |
| Inlinois .- | 1 | 75 | 100 | 175 | 14 | 2,250 |  |  |  |  |
| Michigan. | 3 | 73 | 120 | 193 | 44 | 2,810 | \$1,200, 000 |  |  |  |
| Minnesota. | 3 | 43 | 41 | 84 | 37 | 3, $3: 8$ | 2,300,000 |  |  |  |
| Iowa...-. | 3 | 53 | 90 | 143 | 29 | 2, 885 | 2,967, \%80 |  |  |  |
| Missouri. | 1 | 60 | 50 | 110 | 0 | 1,080 | 400,000 |  |  |  |


| Location. | Name of institution. |  | Presidont or dean. |
| :---: | :---: | :---: | :---: |
| 1 | 3 | 3 | 4 |
| St. Bernard, Ala | St. Bernard Seminary (R. | 1892 | Benedict Menges, O.S.B.- |
| T'alladega, Ala... | Talladega College, Theological Department (Cong.). | 1867 | George W. Andrews, D. D. |
| Tuscaloosa, Ala | Stillman Institute (Presb.) \% ......... | $18 \% 6$ | O. B. Wilson |
| Berkeley, Cal.. | Berkeley Bible Seminary (Disc.) \% | 1896 | Samuel M. Jeficorson, A. M., LL.D. |
| Oakland, Cal | Pacific Theological Seminary (Cong.) - | 1869 | John Knox McLean, D. D. |
| San Anselmo, Cal. | San Francisco Theological Seminary (Prest.). | 1871 | Robert Mackenzie, D. D... |
| San Irateo, Cal | Church Divinity School of the Pacific (P. E.). | 1893 | William F. Nichols, D. D.- |
| Denver, Colo | Mat thews Hall, Denver Theological School (P. E.). | 18.3 | John F. Spaulding, D. D .. |
| University Park, Colo. | Iliff School of Theology, University of Denver (M. E.). | 189: | Arthur H. Briggs, A. Mr., S. T. D. |
| Hartford, Conn.-. | Hartford Theological Seminary (Cong.). | 1834 | Chester D. Hartranft, D. D. |
| Middletown, Conn | Berkeley Divinity School (P. E.) ....- | 1854 | John Binney, D. D ....... |
| New Haven, Conn | Yale Divinity School (Cong.) ........ | 182\% | George P. Fisher, D. D., LS. D. |
| Washington, D.C. | Catholic University of America, Theological Department (R. C.). | 1889 | Charles P. Grannan, D. D. |
| do | Howard University, Theological School (nonsec.). | $18 \% 0$ | John L. Ewell, D. I |
|  | King Hall Theological School (P. E.). | 1890 | William $T$. Tunne |
| Atlanta | Atlanta Baptist Seminary .-.......... | 1867 | George Sale, A. M |
| ...-. do | Gammon Theological Seminary (M. E.). | 1883 | Edward L. Parks, D. D., chairman. |
| Bourbonnais, Ill -- | St. Viateur's College (R. C.) | 1808 | M. J. Marsile, C. S. V-..... |
| Chicago, Ill ......- | Chicago Lutheran Theological Seminary. | 1891 | R. F. Weidner, D. D., LL. D. |
| do | Chicago Theological Seminary (Cong.). | 1858 | Franklin W. Fisk, D. D., LL.D. |
| do | McCormick Theological Seminary (Presb.). | 1830 | AugustusS.Carrier, D.D., chairman. |
| -do | University of Chicago, Divinity School. | 1865 | Eri B. Hulbert, D. D., LL. D. |
|  | Western Theological Seminary (P.E.) | 1885 | William J. Gold, S. T. D |
| Eureka, Ill | Eureka College, Bible Department (Disc.). |  | B.J. Padiord, A. M |
| Evanston, Ill....-- | Garrett Biblical Institute, Northwestern University (M. E.). | 1854 | Charles J. Little, Pl. D., LL. D. |
|  | Norwegian Danish Theological Seminary. | 1885 | Nels E.Simonse |
| Galesburg, Ill. | Ryder Divinity School, Lombard University (Univ.). | 1881 | C. Ellwood Nash, A. II., D. D. |
| Greenville, Ill. | Greenville College, School of Theology (Fr. Meth.). |  | W. T. Hogg |
| Naperville, Ill.- | Union Biblical Institute (Ev. Asso.) | $18 \% 6$ | Thos. Bowman |
| Rock Island, 1ll... | Augustana Theological Seminary (Ev. Luth.). | 1860 | Olof Oleson, Ph.D., D.D |
| Springfield, Ill | Concordia College (Ev. Luth.) ...... | 1846 | Peinhold Pieper -......... |
| Upper Alton, Ill .- | Shurtleff College, Theological Department (Bapt.). |  | A. A. Kendrick, D. D., LL.D. |
| Merom, Ind.--.-- | Union Christian College, Theological Department (Christian). | 1859 | L. J. Aldrıch |
| St. Meinrad, Ind . | St. Meinrad's Ecclesiastical Seminary (R. C.). | 18.0 | Athanasius Schmitt |
| Upland, Ind. ...... | Reade Theological Seminary of Taylor University (M. E.). | 1892 | John H. Shilling, Ph. D |
| Charles City Iowa | Charles City College (M. E.) -......... | 1891 | J. F. Hirsch, A. M |
| Des Moines, Jowa. ....- do .............. | Drake University, Bible Department (Christian). <br> Grand View College (Ev. Luth.)..... | 1881 1896 | A. M. Haggard .... <br> R.R. Vestergaard |

theology for the year 1890－1900．

| Session closes－ |  |  | $\begin{gathered} \text { "şuəp } \\ \text {-nłs jo xəqunti ə[oपM } \end{gathered}$ | $\begin{aligned} & \text { Number of women in- } \\ & \text { cluded. } \end{aligned}$ |  |  |  | $\text { .xษəんً แ!̣ syəə } M$ |  |  |  |  | ； ．告第 re B O O |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 6 | g | 3 | 9 | $1{ }^{1}$ | 1通 | 夏8 | 188 | 1发 | 18 | 16 | 自＇g | 曾发 |  |
| June 20 June 12 | $\stackrel{4}{2}$ | 2 | 18 | 0 0 | $\cdots$ | 1 | 3 3 | $a 40$ 35 | $\begin{gathered} \$ 80,000 \\ (b) \end{gathered}$ | \＄8，010 |  |  | 3,400 2,000 | 1 |
| May $2 \sim$ | 1 | 0 | 12 | 0 3 | 4 | 0 1 | 3 | 35 36 | 6,000 8,000 | 0 000 |  |  | a3， 000 | 3 |
| Apr． 10 | 5 | 1 | 17 | 1 | \％ | 2 | 3 | 34 | 60,000 | 275， 000 | \＄80， 000 | \＄12，500 | 7，300 | 5 |
| Apr． 25 | 7 | 3 | $3 t$ | 0 | 8 | 26 | 3 | 32 | 222， $27 \%$ | 265， 841 | 2，4：26 | 13，024 | a 15，815 | 6 |
| June 1 | 3 |  | 10 | 0 | （ | 5 | 3 | 36 | 15,000 | 35，000 |  | 4，7\％0 | a 3， 000 | 7 |
| May 31 | 3 | 3 | 8 | 0 | ＊ |  | 3 | 35 | 80,000 | 0 | 0 |  | a 8， 000 | 8 |
| May 16 | 5 | 1 | 23 | 0 | 1 | 7 | 3 | 32 | $6:, 000$ | 100，000 | 10，000 | 6，088 | c 4,000 | 9 |
| May 50 | $1:$ | \％ | 74 | 9 | 23 | 70 | 3 | 33 | 265,090 | 200，000 | 10，663 | 47，311 | 81，892 | 10 |
| June 6 May \％ | 5 7 | 1 | 17 100 | 0 | 888 | 8 | 3 3 | 37 32 | 85,820 $* 350,400$ | 423,949 $* 649,1 \geqslant 3$ | $c: 24,727$ | 15,149 | 30,000 $* 14,000$ | 11 |
| June ò | 6 | 0 | $\%$ | 0 | 16 |  |  | 36 | 350， 600 | 366，000 |  |  | 29,090 | 13 |
| May ${ }^{8}$ | 2 | 9 | 56 | 0 | 4 | 1 | 3，4 | 34 | （b） | 45，100 | 1，365 |  | 1，400 | 14 |
| May 30 | 3 |  | 14 | 0 | \％ | 0 | 3 | 35 | $\therefore 5,000$ |  |  |  | a 800 | 15 |
| Apr． 30 | 2 | 0 | 28 | 0 | 0 | 0 | 3 | 24 |  |  |  |  |  | 16 |
| May 10 | 4 | 1 | 101 | 29 | 18 | 9 | 3 | 31 | 100，000 | 562，096 | 2.160 | 19，173 | 12，000 | 17 |
| Sept． 5 | 4 |  | 24 | 0 | 3 | 10 | 3 | 35 |  | 0 | 0 |  | 5，000 | 18 |
| Apr． 28 | 3 | 5 | 37 | 0 | 9 | 25 | 3，4 | 30 | 150，000 | 0 |  | 8，000 | 4，500 | 19 |
| May 9 | 12 | 3 | 120 | 2 | 36 |  | 3 | 30 | 317， 883 | 9\％2，785 | 1，000 | 60，000 | 20,500 | 20 |
| May 3 | 8 | 1 | 156 | 0 | 49 | 143 | 3 | 32 | 300，000 | 533， 859 | d31，733 | 39，55\％ | 21，200 | 21 |
| June 23 | 20 | 5 | 383 | 28 | 4\％ | 240 | 3 | 35 | （b） | （b） | （b） |  | a．50， 000 | 22 |
| May 31 | 5 | 0 | 20 | 0 | 9 | 9 | 3 | 36 |  |  | 0 | 8，500 | 4，000 | \％3 |
| June 27 | 2 | 1 | 22 | 0 | 0 |  | 3 | 39 | 0 | 2，000 | 0 |  | a 1，000 | 24 |
| May 95 | 9 | 2 | 18： | 6 | ＊33 |  | 3 | 34 | （250， 000 |  |  |  |  | 25 |
| May 5 | 1 |  | $1 \%$ | 0 | 5 |  | 4 | 32 | 16，000 | 5， 000 |  |  |  | 26 |
| June 5 | 4 |  | 7 | 0 | 1 | 1 | 4 | 38 | （b） |  |  |  | （ 2， 000 | 27 |
| June 7 | 2 |  | 8 | 1 |  | －－ | 3 | 40 |  |  |  |  |  | 28 |
| June： 0 | 2 | 0 | 42 | 0 | 13 | 6 | $\stackrel{2}{2}$ | 42 |  | 20，000 | 0 |  | 500 | 29 |
| May 31 | 3 | 2 | 63 | 0 | 17 | 17 | 3 | 30 |  | 23，000 |  | 11，000 | a 5，000 | 30 |
| June 28 | 5 | 0 | 151 | 0 | 3 \％ | $\stackrel{0}{6}$ | 3 | 42 | 100，000 | 23， 000 | 0 |  | a 8，000 | 31 82 88 |
| June 5 | 4 |  | 10 | 1 | －－－ | 2 | 2 | 38 |  | 23，000 |  | 1，400 |  | 0\％ |
| June 14 | 3 | 2 | 毋 | 8 |  |  | 3 | 36 |  |  |  |  |  | 33 |
| June～1 | 7 | 2 | 39 |  | 2 | 14 | 3 | 40 |  |  |  |  | 14，000 | 34 |
| June ： | 4 | 3 | 80 | 5 | 4 | 4 | 3 | 36 | （b） | （b） |  | （b） | 250 | 35 |
| June 15 | $\underset{\sim}{2}$ | 0 | 8 | 0 | 8 | 0 | 3 | 39 |  | 6，760 |  | 700 | 500 | 38 |
| June 14 | 7 | 2 | 110 | 21 | 19 |  | 3 | 37 | （b） | ， |  |  |  | 37 |
| May 31 | 2 | 1 | 13 | 0 | 0 | 0 | 3 | 33 |  | 0 | 0 | 2，000 | 3，000 | 38 |

$c$ Received by bequest of Rev．John Williams，D．D．，late bishop of Connecticut，who died Feb－ ruary 6， 1899.
a From Mrs．Nettie F．McCormick，Chicago，Ill．，$\$ 18,752 ;$ Cyrus H．McCormick，$\$ 3,125$ ；Harold F． McCormick，$\$ 3,125$.

Table 9.-Statistics of schools of

\begin{tabular}{|c|c|c|c|}
\hline Location. \& Name of institution. \& :su!̣uədo ұs.xy Jo .теәл \& President or dean. <br>
\hline 1 \& 2 \& 3 \& 4 <br>
\hline Dubuque, Iowa. - \& German Presbyterian Theological School of the Northwest. Wartburg Seminar`y (Ev. Luth.) .-.. \& 1852
1854 \& $$
\begin{aligned}
& \text { Adam W. Ringland, D. D.- } \\
& \text { S. Fritschel, D. D }
\end{aligned}
$$ <br>
\hline Mount Pleasant, Iowa. \& German College (M. E.) --.---....---. \& 1873 \& Edwin S. Havighorst, A. M., D. D. <br>
\hline Atchison, Kans .- \& Western Theological Seminary (Ev. Lutli.). \& 1895 \& Frank D. Aitman, D. D .-. <br>
\hline Kansas City, Kans \& Kansas City University, College of Theology (Meth. Prot.). \& 1896 \& H. 'T. stephens <br>
\hline Danville, Ky - \& Presbyterian Theological Seminary- \& 1853 \& J. M. Worrall, D. ${ }^{\text {W }}$-...... <br>
\hline Louisville, Ky \& Louisville Presbyterian Theoiogical Seminary. \& 1893 \& W. Hoge Marquess, D. D .- <br>
\hline \& Southern Baptist Theological Seminary. \& 1859 \& E. Y. Mullins, D. D <br>
\hline New Orleans, La - \& Straight University, Theological Department (Cong.). \& \& George W. Henderson .... <br>
\hline Bangor, Me \& Bangor Theological Seminary (Cong.). \& 1816 \& John L. Crosby, treasurer. <br>
\hline Lewiston, Me \& Cobb Divinity School, Department of Bates College (Free Bapt.). \& 1840 \& James A. Howe, D. D .....- <br>
\hline Baltimore, \& St. Joseph's Seminary (R. C.) ........ \& 1889 \& J. R. Slattery - .-...-.-.--- <br>
\hline Il \& St. Mary's Seminary (R. C.) --.......- \& 1791 \& A. L. Magnien, D. D........ <br>

\hline Mount St. Marys, Md. \& | Redemptorist College of inchester (R. C.). |
| :--- |
| Mount St. Marys Theological School (R. C.). | \& 1867

1808 \& Werdinand A.Litz, rector'- <br>
\hline Westminster, Md. \& Westminster Theological Seminary (Meth. Prot.). \& 1882 \& Hugh L. Elderdice, A. M., D. D. <br>
\hline Woodstock, M \& Woodstock College (R. C.) --.-.- --.-. \& 1869 \& Burchard Villiger <br>
\hline Andover, Mass \& Andover Theological Seminary (Cong.). \& 1808 \& George F. Moore, D. D <br>
\hline Boston, Mass.-.-. \& Boston University, School of Theology (M. E.). \& 1839 \& Marcus D. Buell, A. M., S. T. D. <br>
\hline \& St. John's Boston Ecclesiastical Seminary (R. C.). \& 1884 \& John B. Hogan, D. D <br>
\hline Cambridge, Mass \& Episcopal Theological School (P.E.)- \& $186 \%$ \& George Hodges, D. D .-.... <br>
\hline ...-- do .-....-...... \& Harvard University, Divinity School (nonsec.). \& $181 \%$ \& Charles C. Everett, D. D., LL. D. <br>
\hline do \& New Church Theological School (Swedenborgian). \& 1866 \& James Reed, A. M.----...... <br>
\hline Newton Center, Mass. \& Newton Theological Institution (Bapt.). \& 1825 \& Nathan E. Wood, D <br>
\hline Tufts College, Mass. \& Tufts College, Divinity School (Univ.). \& 1869 \& Charles H. Leonard, D. D.- <br>
\hline Adrian, Mich . \& Adrian College, School of Theology (Meth. Prot.). \& 188: \& David Jones, D. D <br>
\hline Hillsdale, Mich .-. \& Hillsdale College, Theological School (F. W. Bapt.). \& 1864 \& D. B. Reed, D. D <br>
\hline Holland, Mich ...- \& Western Theological Seminary (Ref. Ch.in America). \& 1866 \& John W. Beardslee, D. D <br>
\hline Saginaw, Mich.... \& Evangelical Lutheran Therlogical Seminary.* \& 1886 \& W. Linsermann <br>
\hline Collegeville, Minn \& St. John's Seminary (R.C.)*-----.-- \& 1867 \& Peter Engel, Ph. D ------- <br>
\hline Faribault, Minn -- \& Seabury Divinity School (P.E.) \& 1859 \& <br>
\hline Minneapolis, Minn \& Augsburo Seminary (Ev. Luth.)---- \& 1869 \& Georg S verdrup-.-......-
Marcus O. Bockman, <br>
\hline Red Wing, Minn \& Red Wing Seminary (Ev. Luth.) \& 1879 \& M. G. Hanson <br>
\hline St. Paul, Minn \& German Luther Seminary (Ev.Luth.) \& 1885 \& H. Ernst, D. D...-.------- <br>
\hline ---- do ... \& St. Paul's College ( II. E.) . \& 1889 \& <br>

\hline \& | St. Paul Seminary (R.C.) |
| :--- |
| Christian University, Theological | \& 1894

1855 \& Patrick R. Heffron, D. D Clinton Lockhart, A. M., <br>
\hline Canto11, Mo .-.....
Florisant, Mo \& Chisistian University, Theological Department (Disc.). \& 1855

1823 \& | Clinton Lockhart, A. M., Ph. D. |
| :--- |
| P Hagemann | <br>

\hline Florisant, Mo ${ }_{\text {Mansas City, }}^{\text {Mo.-- }}$ \& St. Stanislaus Seminary (R.C.)----.. \& 1823 \& P. Hagemann <br>
\hline Kansas City, MO-- \& Redemptorist Seminary of the St. Louis Province (R.C.). \& 1887 \& Ferreol Girardey <br>
\hline St. Louis, Mo...-.- \& Concordia Theological Seminary (Ev. Luth.). \& 1839 \& Francis Pieper .-----...-. <br>
\hline
\end{tabular}

[^114]theology for the year 1899-1900-Continued.

c $\$ 25,000$ from Mr. W. E. Schermerhorn, of New York City.

Table 9.-Statistics of schools of

| , | Location. | Name of institution. |  | President or dean. |
| :---: | :---: | :---: | :---: | :---: |
|  | E | \% | 3 | 1 |
| 80 81 | St. Louis, Mo | Kenrick Theological Seminary (R. C.) | 1893 1850 | Francis V. Nugent |
|  |  | Theological Seminary of the (xerman Evangelical Synod of North America, or Eden College. |  |  |
| $\frac{83}{83}$ | Warienton, Mo. | Cential Wesleyan College (M. E.) -... | $\frac{1864}{1891}$ | Geor |
|  |  |  |  | WL. D. Hairman. D., |
| $8 \pm$ | Bloomfield, N.J .- | German Theological school of Newark (Presb.). | 9 | Henry J. Wober, Ph. D., reporter. |
| 8.) | Madison, N.J | Drew Theological Seminary (M.E.).. | 186\% | Henry A. Buttz, D. D., LL. D. |
| 86 | New Brunswick, N.J. | Theological Seminary of the Reformed (Dutch) Church in America. | 1784 | Samuel M. Woodbridge, D.D., LL. D. |
| 87 | Princeton, N. J . | Princeton Theological Seminary (Presb.). | 181: | Wm. M. Paxton, D. D., LL. D. |
| 88 | South Orange, N. J. | Seminary of the Immaculate Concention (K. C.).* | 1856 | John A. Stafford .--.--...- |
| 89 | Allegany N. Y.... | St. Bonaventure's Seminary (R.C.).. | 1860 | Joseph F. Butler .-........ |
| 90 | Auburn, N. Y | Auburn Theological Seminary (Presb.). | 1819 | Geor'ge B. Stewart, D. D... |
| 91 | Brooklyn, N. Y | St. John's Theological Seminary | 1891 | James J. Sullivan, C. M .-. |
| 92 | Buffalo, N. Y | German Martin Luther Seminary ... | 18551 | John A. Graban........-- |
| 93 | Canton, N | Canton Theological Seminary of St. Lawrence University (Univ.). | 1856 | Almoll Gunnison, D. D.... |
| 94 | Hamilton, N. Y | Hamilton Theological Seminary, Col- | 1819 | George E. Merrill, D. D .-- |
| 95 | Hartwick Seminary, N. Y. | Hartwick Seminary (Ev. Luth.) ..... | 1\%9\% | Alfred Hiller, D. D., chairman. |
| 96 | New York, N. Y | General Theological Seminary of the Protestant Episcopal Church. | 181\% | Eugene A. Hoffman, D. D., LL. D.. D. C. L. |
| 97 | do | Jewish Theological Seminary (He- | 1886 | Joseph Blumenthal ---...- |
| 98 | do | Union Theological Seminary (Presb.) | 1836 | Charles C. Hall, D. D |
| 99 | Niagara Univer. sity, N. Y. | Niagara University, Theological Department (R.C.). | 1856 | P.S. McHale, C. M |
| 100 | Rochester, N. Y .- | Rochester Theological Seminary (Bapt.). | 1851 | Augustus H. Strong, D. D., LL.D. |
| 101 | do | St. Bernard's Seminary (R.C.) | 1893 | B. J. McQuaid -............ |
| 102 | Standfordville, N. Y. | Christian Biblical Institute (Christian). | 1879 | John B. Weston, D. D .-... |
| 103 | Yonkers, N. Y .-. | St. Joseph's Seminar'y (R.C.) ...-.... | 1896 | Edward R. Dyer |
| 104 |  |  | 1889 | Leo Haid, D. D <br> D. J. Sanders, D. D |
| 105 | Charlotte, N. ${ }_{\text {Carthagena. }}$ Ohio | Biddle University, Theological School (Presb.). <br> St. Charlos Seminary (R.C.) | 1867 1863 | D.J. Sanders, D, D. --....... |
| 106 107 | Carthagena, Ohio | St. Charles Seminary (R. Hebrew Union College | 1875 | Aug. Seifert ............... |
| 108 |  | Lane Theological Seminary (Presb.). | 1829 | David S. Schaff, D |
| 109 | Cleveland, Ohio .. | St. Mary's Theological Seminary (R. | 1848 | N.A.M |
| 110 | Columbus, Ohio | German Evangelical Lutheran Semi- | 1830 | F.W.Stellhorn, D. D |
| 111 | Dayton, Ohio ---- | Union Biblical Seminary (U.Breth.) | 1873 | George A. Funkhouser, D. D. |
| 112 | Gambier, Ohio | Kenyon College, Divinity School | 1826 | William F. Peirce, L.H.D. |
| 11:3 | Oberlin, Ohio | Oberlin Theological Seminary | 1835 | John Henry Barrows, |
| 114 | Springfield, Ohio. | (Cong.). <br> Wittenberg College, Theological Seminary. | 1845) | $\begin{aligned} & \text { Samuel A. Ort, D. D., } \\ & \text { LL.D. } \end{aligned}$ |
|  | $\begin{aligned} & \text { *In } 18 \\ & a \mathrm{App} \\ & b \mathrm{Leg} \\ & c \mathrm{In} \mathrm{c} \\ & d \mathrm{Hal} \\ & e \mathrm{Mrirs} \end{aligned}$ | 08-99. <br> roximately. <br> acy of $\$ 12,50$ from A. A. Tibbe, Washin mmon with the university or college. hh Voorhees, of Clinton, N.J., gave $\$_{2}^{25}$ Mary A.Richardson, of Worcester, M | ton, <br> 00. ass., | Io. <br> ave $\$_{2} 4,000$. |

theology for the year 1899-1900-Continued.

| Session closes- | Number of professors. |  |  |  | *006[ и! реұепръгю |  | - ตsınoo әपұ ष! s.iea |  |  |  |  |  | $\stackrel{y}{*}$ <br> . <br>  <br> ت 0 0 0 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 65 | g | 8 | 9 | 16 | 1通 | 18 | 18 |  | 15 | 163 | 17 | 18 |
| June 15 | 10 3 | 0 1 | 93 7 7 | 0 0 | 19 | 0 | 3 | 40 | \$150.000 | 811, $\begin{array}{r}0 \\ 465\end{array}$ | b 812,768 | \$1,600 | a 20,000 6,000 |
| $\begin{aligned} & \text { June } 14 \\ & \text { Apr. } \because \% \end{aligned}$ | 3 5 | 0 | 41 19 | 0 0 | 3 8 | 0 10 | 3 3 | 40 30 | (c) | $3 \check{3}, 000$ | 0 |  | $\begin{gathered} (c) \\ c: 2,600 \end{gathered}$ |
| May 25 | 3 | 2 | 9 | 0 | 1 | 0 | 3 | 40 | 2t, 000 | 54,000 | a \% 7,000 |  |  |
| May 20 | 6 | 1 | 206 | 0 | 63 | 127 | 3 | 35 | 500,060 | 358, 290 | 100, 060 | 32,697 | 52,000 |
| May 17 | 5 | 2 | 35 | 0 | 15 | 25 | 3 | 33 | 250,000 | (1495, 000 | d30,000 | 16,500 | 44,579 |
| May 10 | 8 | 5 | 196 | 0 | \% 2 |  | 4 | 35 | 52.6,150 | 1,357,085 | 21,713 | 80,375 | 65,000 |
| June 18 | 5 | 1 | 31 |  | 7 |  |  |  |  |  |  |  |  |
| ${ }^{5}$ une 24 | 6 | 3 | 64 | 0 | 12 | 30 | 4 | 42 | 29,200 |  |  | 22,300 | 9,287 |
| May 10 | 9 | 1 | 91 | 0 | 39 | 68 | 3 | 32 | 300,000 | 541, 452 | 9,370 | 32, 488 | 25,378 |
| July 15 | 8 | 0 | 47 | 0 | 10 | 8 | 4 | 40 | 140, 000 | 0 | 0 |  | 2,500 |
| June 28 | $\underset{2}{2}$ | 2 | 14 | 0 | 3 | 0 | 3 | 40 | 12, 500 |  |  | 1,921 | 1,233 |
| June 22 | 5 | 2 | 23 | 4 | 7 | 0 | 3 | 40 |  |  | e 28, 500 | 7,500 |  |
| June 10 | 7 | 2 | 46 | 0 | 16 | 25 | 3 | 37 |  |  |  |  |  |
| June 28 | 2 | 0 | 8 | 0 | 0 | 2 | 3 | 38 | 11, 600 | 3,682 | 800 |  |  |
| May ¿5 | 5 | 6 | 120 | 0 | 40 | $\%$ | 3 | 36 | 1,4\%3,000 | 2, 096,288 | f 201, 408 | 85,873 | 29,5\%3 |
| June 5 | 3 | 3 | 30 | - | 4 | 3 |  | 40 | 25,000 |  | 2,500 | 7,000 | 5,100 |
| May 15 | 11 | 4 | 118 | 0 | 37 | 29 | 3 | 30 | 500, 060 | a1,760,000 |  | a 94,000 | a 74, 385 |
| June 19 | 8 | 2 | 47 | 0 | 6 | -..- | 4 | 42 | a 45,000 | 0 | 2,000 | a 10, 300 | a 1, 150 |
| May 10 | 12 | 0 | 148 | 0 | 49 | 40 | 3 | 36 | 131,631 | 668,458 | 35, 024 | 36,551 | 30,497 |
| June 15 | 9 |  | 90 |  | 12 |  | 4 |  | 209, 000 |  |  |  | 9,000 |
| May 9 | 6 | 1 | 17 | 4 | 4 | 0 | 3 | 34 | 27,000 | 57,065 | 1,4.6 | 3,614 | 1,987 |
| June 18 | 10 | 2 | 113 | 0 | 10 | $a!0$ | 4 | 39 | 1,120,000 |  | $g 15,000$ | 45,251 | 22,000 |
| June 13 | 5 | 2 | 14. | 0 | 4 | 5 | 3 | 40 |  |  |  |  | 8,693 |
| June 5 | 4 |  | 15 | .--- | 3 | 2 | 3 | 32 | (c) |  |  |  | 12, 500 |
| June 28 | 3 | 2 | 29 | 0 | 0 | 14 |  | 42 |  |  |  |  |  |
| June 15 | 9 | 1 | 73 | 0 | 11 |  |  | 38 | 10,000 |  |  | 21,552 | a 15, 000 |
| May 10 | 4 | 3 | 26 | 0 | 11 | 21 | 3 | 32 | 250, 000 | 200, 000 |  | 15,033 | 18,700 |
| June:5 | 4 | 3 | 40 | 0 | 4 | 0 |  | 42 | 75, 000 | 0 | 12,000 | 0 | 10,000 |
| June~8 | 4 | 0 | 38 | 0 | 15 | 33 | 3 | 40 | 125, 000 |  |  |  | 6, 060 |
| May 7 | 4 | 0 | 53 | 11 | 8 | 20 | 3 |  | 38,000 | 65, 000 | \%,192 | 9,875 | 3,000 |
| June $2 \%$ | 4 | 2 | 18 | 0 | 7 | 11 | 3 | 34 | 40,000 | 100,000 | 10,000 | 5,000 | 12,000 |
| May 18 | 8 | 2 | 40 | 2 | 13 | 19 | 3 | 32 | 75,000 | 225,000 | h:20,000 | 11,000 | 43, 300 |
| May 1 | 3 | 1 | 26 | 0 | 10 | 24 | 3 | $3 \%$ | (c) | (c) |  |  |  |

$f$ The dean of the seminary gave $\$ 10,000$ to the building fund: 825,000 was given by an unknown friend of the seminary to help finish Hoffman Hall", containing refectory and gymnasium; $\$: 0,000$ was given by a friend to help build Eigenbrodit Hall, containing dormitories; 5117,000 was received from the estate of Charles H. Contoit, late of New York City; the Protestant Episcopal Society for Promoting Religion and Learning in the State of New York gave the seminary §5,000.

9 From Eliza O'Donnell $\$ 5,000$ and from Margaret Kelly $\$ 10,600$, less inheritance taz.
MFrom Mrs. Caroline Haskell, Michigan City, Ind., for endowment.

Table 9.-Statistics of schools of

|  | Location. | Name of institution. | Year of first opening. | President or dean. |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | s | 3 | 4 |
| 115 | Tifin, Ohio | Heidelberg Tbeological Seminary, Heidelberg University (Ref.Ch. in U.S.). | 18,1 | David Van Horne, D. D., LL. D. |
| 116 | Wilberforce, Ohio | Wilberforce University, Payne Theological Seminary (A.M.E.). | 1892 | Berry T. Tanner, D. |
| $11 \%$ | Xenia, Ohio | Xenia Theological Seminary ( $U$. Presb.). | 1794 | William G. Moorehead, D. D. |
| 118 | Eugene, Oreg | Eugena Divinity School (Disc.) --. | 1895 | Eugene C. Sanderson, D. D |
| 119 | Allegheny, Pa | Allegheny'Theological Seminary (U. Presb.). | 1825 | James A. Grier, D. D., LL. D. |
| 120 | do | Reformed Presbyterian Theological Seminary. | 1856 | David B. Willson, D. D ...- |
| 121 | --- do ---- | Western riheological Seminary (Presb.). | 1825 | Thomas H. Robinson, D. D |
| 122 | Beatty, Pa | St. Vincent's Seminary (R.C.) --...- | 1845 | Leander Schnerr |
| 123 | Bethlehem, | Moravian Theological Seminary .--- | $180{ }^{\prime \prime}$ | Augustus Schultze, D. D.. |
| 124 | Chester, Pa | Crozer Theological Seminary (Bapt.) - | 1868 | Henry G. Weston, D. D., LL. D. |
| 125 | Gettysburg, Pa | Evangelical Lutheran Theological Seminary. | 1826 | Milton Valentine, D. D., LL. D. |
| 126 | Lancaster, Pa | Theological Seminary of the Reformed Church in the United States. | 1825 | Emanuel T. Gerhart, D. D., LL. D. |
| 12\% | Lincoln Univer- | Lincoln University, Theological Department (Presb.). | $18 \% 1$ | Isaac N. Rendall, D. D. .-. |
| 128 | Mieadville, Pa.... | Meadville Theological School (Unitarian). | 1844 | George L. Cary, L. H. |
| 129 | Overbrook | Philadelphia Theological Seminary of St. Charles Borromeo (R.C.). | 1832 | P.J. Garrey, D. D |
| 130 | Philadelphia, Pa.- | Divinity School of the Protestant Episcopal Church. | 1862 | Edward T. Bartleitt, D. D.- |
| 131 | do | St. Vincent's Seminary (R. C.) --.... | 1868 | James McG |
| 132 |  | Temple College Philadelphia Theological School (nonsec.). | 1894 | Russell H. Conwell...----- |
| 133 | do | Theological Seminary of the Evan gelical Lutheran Church. | 1864 | $\begin{aligned} & \text { Fenry E. Jacobs, D. D., } \end{aligned}$ |
| 134 | do | Ursinus College School of Theology (Ref. Ch. in U.S.). | $18 \% 1$ | James I. Good, D |
| 135 | Selinsgrove, Pa..- | Susquehanna University, Theological Department (Ev. Luth.). | 1858 | Charles W. Heisler, D. D .- |
| 136 | Villanova, Pa | Augustinian College of Villanova (R.C.). | 1813 | Michael J. Locke |
| 13 \% | Columbia, S. C | Presbyterian Theological Seminary* | 18\%9 | W.M. McPheeters, D. D., chairman. |
| 138 | Duewest, S. C. | Erskine Theological Seminary (A. P. Presb.). | 18.24 | W. L. Pressly, D. D .-.-. .-. |
| 139 | Mount Pleasant, S. C. | Evangelical Lutheran Seminary. | 1830 | John A. Morehead |
| 140 | Chattanooga, Tenn. | U. S. Grant University, School of Theology (M. E.). | 1889 | John H. Race |
| 141 | Clarksville, Tenn. | Southwestern Presbyterian University, Divinity School. | 1885 | George Summey, D. D |
| 14: | Lebanon, Tenn .-- | Cumberland University, Theological School (Cumb. Presb.). | 1853 | J. M. Hubbert, D. D |
| 143 | Nashville, Tenn .- | Central Tennessee College, Theological Department (M.E.). | 1889 | John Braden, D. D |
| 144 | do | Fisk University, Theological Department (Cong.). | 1892 | E. M. Cravath, D. D |
| 145 | _do | Vanderbilt University, Biblical Department (M.E.). | $18 \% 5$ | Wilbur F. Tillett, D. D |
| 146 | Sewanee, Tenn | Uisiversity of the South, Theological Department (P.E.). | $18 \% 8$ | William P. Dubose, S. T. D. |
| $14 \%$ | El Paso, Tex .-.-.- | Rio Grande Congegational Training school.d | 1892 | A. C. Wright |
| 148 | Richmond, Va | Richmond Theological Seminary (Bapt.).* | 186\% | George F. Genung, D.D .-- |
|  |  | * In 1898-99. <br> a In common with the university or乙 Approximately. | coll |  |

theology for the year 1899－1000－Continued．

| Session closes－ |  |  |  | $\begin{gathered} \text { 'pәpulo } \\ \text {-ז! uәuoM jo .тәqum } N \end{gathered}$ |  |  |  | Weeks in year． |  |  |  | $\begin{aligned} & \text { Total income, excluding } \\ & \text { luenefactions. } \end{aligned}$ | $\ddot{\square}$ <br> ． <br>  <br> ت |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 6 | $y$ | 8 | 9 | 13 | 直至 | $\underline{19}$ | 星3 | 34 | 15 | 16 | 面学 | 18 |  |
| Apr． 21 | 5 | 0 | 17 | 0 | 5 | 3 | 3 | 32 | \＄1，200 | \＄33， $3 \times 5$ | \＄8，000 | 87，656 | （a） | 115 |
| June 20 | 3 | 4 | 42 | 2 | 9 | 3 | 2，3 | 36 | 12，000 |  |  | 3，500 | 2，200 | 116 |
| May | 4 | 0 | 28 | 0 | 16 | $2 \%$ | 3 | 32 | 30，000 | 131， 860 | 6，500 | 8，000 | b6，000 | 117 |
| June 6 May 20 | 3 4 | $\stackrel{2}{0}$ | 21 | 5 | 6 14 | 3 60 | 4 3 | 36 32 | 8,000 125,000 | 250，000 | 2,000 | 16,000 | 900 6,000 | 118 119 |
| May 2 | 2 | 1 | 9 | 0 | 3 | S | 3 | 32 | 25，000 | \％6，546 | 1，581 | 4，075 | 3，600 | $1 \% 0$ |
| Nay 3 | 5 | 2 | 65 | 0 | 22 | 58 | 3 | －－ | 250， 000 | 610，421 | 36， 923 | ：99，958 | 630，000 | 121 |
| June ？ | 4 | 3 | 4.2 | 0 | 9 | 17 | 3 | $3 \%$ |  |  | 1． 0 |  |  | 122 |
| June 12 | $\pm$ | 2 | 11 | 0 | 11 | 9 | ${ }^{2} \frac{1}{2}$ | 38 | 100，000 | 100， 000 | 1，000 | 5，000 | 6，500 | 123 |
| June 5 | $i$ | 1 | $9 \pm$ | 0 | 24 | 33 | 3 | 36 | 100， 000 | 417，500 |  |  | 15，000 | 124 |
| －．－do | 4 | 0 | 39 | 0 | 9 | $3 \%$ | 3 | 35 | 160，000 | 201， $68 \%$ | 18，000 |  | 14，060 | 125 |
| Nay 10 | 5 | 1 | 53 | 0 | 13 | 44 | 3 | 30 | 8．5，c00 | 185， 000 | 1，000 |  | 15，000 | 125 |
| Apr． 20 | 1 | 4 | 45 | 0 | 1.5 | 29 | 3 | 28 | 32， 000 | 139，000 |  | 3，69\％ | （a） | 127 |
| June 7 | 5 | 3 | 29 | 3 | 3 | 5 | 3， 4 | 38 | 61，\％0\％ | 41\％，685 | 2，064 | $2 \sim, 020$ | 625.000 | 128 |
| June 20 | 12 | 2 | 102 | 0 | 16 | 30 |  | 40 |  | 0 | b30，000 | 30,000 | $2 \pm, 000$ | 129 |
| June $\uparrow$ | 6 | 3 | 35 | 0 | $\tau$ |  | 3 | 35 | 200，000 |  | 30,000 |  | 2），060 | 130 |
| June 23 June 1 | $\begin{aligned} & y \\ & 1 \\ & 1 \end{aligned}$ | 3 | $3 \%$ <br> 24 <br> 10 | 0 6 | 3 0 |  | $c{ }^{\frac{1}{5}}$ | 40 32 |  | 0 0 | 0 0 | 200 | 12，60 | 131 132 |
| Jun ${ }^{\text {j }}$ | 4 | 1 | $\%$ | 0 | 29 | －5 | 3 | 32 | 200， 000 | 195， 000 | 1，500 |  | 23，000 | 183 |
| May 2 | 4 | 6 | 34 | 0 | 5 | $2 \pi$ | 3 | 31 |  | （a） |  |  |  | 34 |
| June ${ }^{\text {b }}$ | 3 |  | 18 |  | 4 | 9 | 3 | 38 | （a） | （a） |  |  | 2，500 | 135 |
| June 20 | 5 |  | 20 |  |  |  | 3 | 35 |  |  |  |  | 67，000 | 136 |
| May 10 | $\pm$ | 2 | 24 | 1 | 6 | 18 | ड | 32 | \％3， 000 | b 2\％ŏ， 000 | 2，500 |  | 20，000 | $13 \%$ |
| June 16 | 4 | 0 | 6 | 0 | 4 | 5 | 2 | 36 | （a） | 31，500 | 0 | 2，300 | 2，060 | 135 |
| Nay 30 | 2 | 3 | 13 | 0 | 1 | 13 | 3 | 35 | 15， 000 | 25，000 | 3,000 | 2,500 | 1，500 | 139 |
| May 15 | 3 | 2 | 28 | 0 | 9 | 1 | 3 | 32 | 150，000 | 10，000 | $2,5 \mathrm{C}, 0$ |  | 6，000 | 140 |
| June 18 | 5 | 1 | 28 | 0 | 14 | 16 | 2 | 40 | （a） | （ct） |  |  | （c） | 141 |
| June ら | 8 |  | 54 | 4 | 13 | 35 | 3 | 3 | 50，000 | 82，000 |  |  | 1，200 | 142 |
| May 30 | 2 | 2 | 24 | 2 | 0 | 0 | 4 | 36 | （a） | （a） |  |  |  | 14 |
| June 13 | 1 | 1 | $\%$ | 3 | 1 | 0 | 3 | 37 | 30,000 | 4，083 |  | 242 | 1，000 | 141 |
| June 20 | 6 | 2 | 51 | 0 | 15 | 43 | 3 | 39 | （a） | （ct） |  | b15， 000 | b 6，000 | 145 |
| Aug．： | 4 | 1 | 26 |  | 2 |  | 3 | 40 | 40，000 | 20，000 |  |  | 2，000 | 146 |
| May 31 | 2 | 1 | 6 | 0 | 3 | 0 | 4 | 32 |  |  |  |  | $2 \%$ | $14 \%$ |
| Apr． 20 | $\frac{1}{4}$ |  | 54 | －－－ | 5 | 16 | 4 | 30 | 15，000 | 50,000 |  |  | 5，060 | 148 |

c＂It will be a five years＇course of evening study．＂
$d$ This institution has been transferred to Mexico．

Table 9.—Statistics of schools of

|  | Location. | Name of institution. |  | President or dean. |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 |
| 149 | Richmond, Va | Union Theological Seminary (Presb.) | 1812 | G. B. Strickler, D. D., |
| 150 | Theological Sem- | Episcopal Theological Seminary | 1821 | Angus Crawford, D. D |
| 151 | Franklin, Wis .... | Mission House of the Retormed | 1859 | H. A. Muehlmeier, D. D |
| $\begin{aligned} & 152 \\ & 153 \end{aligned}$ | Nashotah, Wis .... St. Francis, Wis | Nashotah House (P. E.). Provincial Seminary of | $\begin{aligned} & 1842 \\ & 1857 \\ & \hline \end{aligned}$ | Wm. Waiter Webb, D.D Joseph Rainer. $\qquad$ |
| 154 | Wauwatosa, Wis.. | of Sales (R. C.). * Evangelical. Lutheran Theological Seminary. | $18 \% 8$ | Adolph Hoenecke |

* In 1898-99.
theology for the year 1899－1900－Continned．

| Session closes－ |  | $\begin{aligned} & \text { Special or assistant in- } \\ & \text { structors. } \end{aligned}$ | $\begin{gathered} \text { 'squep } \\ \text {-n7̣s jo xoquinu ejou } M \end{gathered}$ |  | －00ist u！рәұепрегп |  | －əs．unoo өч7 प！s．teəス | $\cdot \pi セ \ominus \AA \text { u!̣ syৃeo } M$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | $6{ }^{6}$ | 3 | 8 | 9 | 113 | 真罟 |  | 臭 6 | 3 | 目的 | 66 | 87 | 18 |  |
| May 5 | 5 | 0 | 84 | 0 | 21 | 56 | 3 | 34 | \＄185， 000 | \＄300，000 | a \＄23，000 | b \＄18，000 | 18，000 | 149 |
| June 20 | 4 | 3 | 45 | 0 | 13 | 12 | 3 | 40 | 140，000 | 340,000 |  | 18，800 | 30，000 | 159 |
| Nay $1 \%$ | 3 | 1 | 23 | －－－ | ．－ |  | 3 | 38 |  |  |  |  | 6，000 | 151 |
| May 31 | 4 | 1 | 38 | 0 | 6 |  | 3 | 33 | 60,000 | 80，000 | 5,000 | 14，000 | 17，000 | 152 |
| June 2\％ | 13 | 1 | 230 | 0 | 23 |  | 3 | 40 |  |  |  |  | 12，500 | 153 |
| June 15 | 3 | 1 | 25 | 0 | 8 | 7 | 3 | 40 | 45,000 |  |  |  | 1，100 | 154 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

a George W．Watts，of Durham，N．C．，gave $\$ 20,000$ for a chapel for the seminary． bApproximately．
ED $1900-$ VOL $\mathrm{II}-45$

Table 10.--Statistics of schools

of law for the year 1899-1900.


[^115]| Location. | Name of institution. |  | President or dean. | Session closes- |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 且 | : | \% | 4 | 5 | 6 |
| Lawrence, Kans. | University of Kansas, | 1880 | James W. Green, A. M | June 7 | 3 |
| Danvilie, Ky | Centre College, Law De- | 1894 | I. Proctor Knott | May 28 | 3 |
| Louisville, Ky | University of Louisville, | 1813 | W. O.Harris | Apr. 30 | 3 |
| Richmond, Ky | Central Uriversity, Col- | 1897 | R. W. Miller |  | 2 |
| New Orleans, La. | Tulane University of Lou- | 18 ¢ 4 | Harry H. Sall | May 20 | 5 |
| Bangor, Me | University of Maine. | 1898 | George E. Gardne | June 15 | 3 |
| Baltimore, Ma | Baltimore Law school | 1.00 | Bernard C.Steiner,Ph.D | June 6 | 10 |
| ....-do -....- | Baltimore University: | 1590 | Thomas R. Clendinen... |  | 7 |
| . ${ }^{\text {do }}$ | University of inaryland, |  | John P. Poe | June 4 | 10 |
| Boston, Mass | Boston University, School | 18.: | Samuel C. Bennett | une 5 | 22 |
| Cambridge, Mass | Harrard University, Lav | 1819 | James Barr Ames, LL. D | June 26 | 12 |
| Ann Arbor, Mich | University of Michisa | 1839 | Harry B. Fintchin | June 21 | 11 |
|  | Department of Law. |  |  |  |  |
| Detroit, Mich.--. | Detroit College of Law .-. | 1891 |  | June 23 | 20 |
| Minneapolis, Minn. | University of Minnesota, College of Law. | 1888 | Willian S. Pattee, LL.D | June 1 | 4 |
| Jackson, Miss. | Millsap's College, Law | 1393 | Edward Mayes, LL. D. | June 12 | 3 |
| University, Mis | University of Mississippi, | 185) | G. D. Shands, LL. D |  | 2 |
| Columbia, Mo | University of Missouri, | 1872 | Aloxander Martin, | June 5 | 3 |
| Kansas City, Mo | Kansas City School of Law . | 1835 | William P. Borlan |  | 0 |
| St. Louis, Mo...- | St. Louis Law School, | 186 | William S. Curtis | June 21 | 3 |
| Lincoln, Nebr | University of Nebraska, | 1831 | M. B. Reese | une 7 | 4 |
| Omaha, Neb | Omaba School of Lav | 1897 | T.J. Mahone | June 10 | 13 |
| Albany, N. Y | Albany Law School, Union | 1851 | J. Newton Eiero, | May 31 | 7 |
| Buffalo, N. Y | Bufraio Law School, Uni- | 188\% | Adelbert Moot | May 23 | 9 |
| Ithaca, N. Y | Cornell University, School | 188\% | Francis M. Finch, LL. D. | June 21 | 6 |
| New York, N. Y | Columbia University ${ }^{\text {c }}$ |  | Wm. A. Keener, LL. D. | June 11 | 5 |
|  | Nep York Law School | 1891 | George Chase | une 1? | 3 |
|  | \{New York University, Law | 1831 | Clarence D. Ashley, | - 7 | 9 |
| Syracu | Syracuse University, Col- | 1895 | James B. Brooks, A. M., | June 10 | 4 |
| Chapel Hill, N. | University of North Caro- | 1846 | James C. MacRee, LL. D | June 6 | 4 |
|  | lina, Law School. |  |  |  |  |
| Raleigh, N.C..... | Shaw University, Law | 1889 | E. A.Johnson, LL. D | Mar. 17 | 2 |
| Wake Forest, | Wate Forest Law School.- | 1894 | N. Y. Gulley, M. |  | 1 |
| Ada, Ohio | Ada College of Law, Ohio | 1833 | S.P. Axline | ne 1 | 2 |
| Cincinnati, Ohio. | Normal University. | 1833 | Gustarus H. Wald, LL.D | June 12 | 14 |
| Clevelan 7, | Lav Department. <br> Cleveland Law School of |  |  | June 15 | 11 |
| Crev | Baldwin University. |  |  |  | 11 |
| ..... do .- .-..- -- --. | Franklin T. Backus Law School, Western Reserve | 1892 | Evan H. Hopkin |  | 12 |
| Columbus, Ohio | University. <br> Ohio State University, | 1891 | William F.Funte |  | 8 |

for the year 1899-1900-Continued.

$c$ The afternoon division from 3.30 to $6 \mathrm{p} . \mathrm{m}$. ; evening division from 8 to $10 \mathrm{p} . \mathrm{m}$.
d Afternoon.

Table 10.-Statistics of schools of law


* In 1898-99.
a In common with the university.
$b$ Reorganized in 1850.
for the year 1899-1900-Continued.

c Approximately
a Mrs. Vincent L. Bradford, Philadelphia, gave the institution $\$ 100,000$; James C. Carter, New York, $\$ 0.700$; John E. Russell, Massachusetts, $\$ 5,000$.

TABLE 11.-Statistics of schools of

|  | Location. | Name of institution. |  | President or dean. | Session closes- |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | '80 | 8 | 4 | 5 | 6 | 8 |
| 1 | Birmingham, Ala | Birmingham Medical College. | 1884 | Eenjamin L. Wyman | Apr. 1 | 12 | 3 |
| 2 | Mobile, Ala | Medical College of Alabama, University of Alabama. | 1859 | George A. Ketchum. | Apr. 5 | 8 |  |
| 3 | Little Rock, Ark. | Arkansas University, Medical Department. | $18 \% 9$ | James A. Dibrell | Apr. 15 | 15 | 4 |
| 4 | Los Angeles, Cai . | University of Southern Caifornia, College of Medicine. | 1885 | Henry G. Brainerd.. | June 14 | 21 | 7 |
| 5 | San Francisco, Cal. | College or̂ Physicians end Surgeons. | 1895 | D. A. Hodghead, A. M. | June 30 | 31 |  |
| 6 | Cal. | Cooper Medical College.. | 1858 | Henry Gibbons, jr., A. M. | Apr. 15 | 15 | 17 |
| 7 | do | Pacific Coast Regular College of Medicine. | 1900 | Tenison Deane.... | Dec. 22 | 17 | 3 |
| 8 | do | University of California, Medical Department. | 186: | Arnold A. D'Ancona. | May 5 | 18 | 13 |
| 9 | do | University of Colorado, Colorado School of Medicine. | 1883 | Luman M. Gifinn..... | Juno $\%$ | 13 | 10 |
| 10 | Denver, Colo | Gross Medical College, Rocky Mountain University. | $188 \%$ | Thomas H. Hawkins, A. M., LL. D. | Apr. 25 | 23 | 9 |
| 11 | do | University of Denver, Denver College of Medicine. | 1881 | Edmund C. Rivers, A. M. | May 13 | 19 | 15 |
| 12 | New Haven, Conn. | Yale University, Department of Medicine. | 1813 | Herkert E. Smith.. | June 28 | 12 | 13 |
| 13 | Washington, D.C | Columbian University, Medical School. | $18 \% 0$ | E. A. de Scweinitz . | May 28 | 25 | 3 |
| 14 | . .do | Georgetown University, School of Medicine. | 1851 | George L. Magruder, A. M. | May 21 | 26 | 4 |
| 15 | do | Howard University, Medical Department. | 1868 | Robert Reyburu, A. M. | May - | 15 | 4 |
| 16 | do | National University, Medical Department. |  | John T. Winter.. | May 31 | 31 | 5 |
| 17 | Atlanta, Ga...... | Atlanta College of Physicians and Surgeons.* | 1854 | W.S.Kendrick .-...- | Apr. 3 | 13 | 2 |
| 18 | Augusta, Ga .-... | University of Georgia Medical College of Georgia. | 18:9 | Eugene Foster .-.... | Apr. 1 | 10 | 8 |
| 19 | Chicago, Ill ...... | American Medical Missionary College. | 1895 | John H. Kellogg..... | June 26 | 12 | 10 |
| 20 | do | College of Physicans and Surgeons, University of Illinois. | $188 \%$ | William E. Quine...- | Apr. 20 | 40 | 35 |
| 21 | -do | Farvey Medical College.. | 1894 | Frances Dickinson .- | June 23 | 44 |  |
| 22 | ----do | Illinois Medical School...- | 1885 | William $\mathrm{F}^{\prime}$. Waugh, A. M. | Sept. 27 | 32 | 10 |
| 23 | do | Jemner Medical College.- | 1893 | Wm. Rittenhouse... | June 20 | 26 | 10 |
| 24 | -....do | Northwesterin University Medical School (Chicago Medical College). | 1859 | Frank S. Johnson, A. M. | ...do .-. | 33 | 16 |
| 25 | .do | Northwestern University, Woman's Medical school. | e18\% | Marie J. Mergler .-.- | June 14 | 25 | 20 |
| 26 | do | Rush Medical College, University of Chicago. | 1843 | Henry M. Lyman, A. I. | (f) | 19 | 41 |
| 27 | Fort Wayne, Ind | Fort Wayne College of Medicine. | 1878 | Christian B. Stemen, <br> A. M., LL. D. | Mar. 27 | 22 | 3 |
| 28 | Indianapolis, Ind | Central College of Physicians and Surgeons. | $18 \% 9$ | $\begin{aligned} & \text { A. M., DL. } \\ & \text { Samuel B. Earp, } \\ & \text { M.S. } \end{aligned}$ | Mar. 30 | 22 | 20 |

mecticine for the year 1899－1900．

| Students． |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { Estimated value of } \\ \text { grounds and buildings. } \end{gathered}$ |  |  | $\begin{aligned} & \text { Total income, excluding } \\ & \text { benefactions. } \end{aligned}$ |  | E宽 <br>  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underset{\text { di }}{\stackrel{y}{0}}$ | $\begin{aligned} & \dot{\theta} \\ & \text { \& } \\ & \text { वे } \\ & \text { से } \end{aligned}$ | -006I U!̣ pəұৃпрехи |  |  |  |  | $\begin{aligned} & \dot{8} \\ & 4 \\ & 4-1 \\ & 0 \\ & \text { 荡 } \\ & E \\ & E \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| 5 | 9 | \＄17） | 直䢒 | d9 | 183 | 真建 | 目采 | 16 | 直合 | 28 | 19 | ${ }^{3} 9$ | 21 | Stis | 518 |  |
| 99 |  | 14 |  | 4 | 26 | Yes． | S50） | §30 | 48330 |  |  |  |  |  | Day | 1 |
| 148 |  | 42 | 10 | 4 |  | b】es． | 100 | 25 | 125 |  |  |  |  |  | Day－ | 2 |
| 122 | 1 |  | 0 | 4 | 26 | Yes． | 50 | 20 | a 250 | 820,600 |  |  | 84，204 |  | Day | 3 |
| 80 | 14 | 18 | 3 | 4 | 31. | No | 130 | 40 | 445 | 23，000 | 0 |  | 8，000 | 2，000 | Day | 4 |
| 130 | 17 | 33 | 15 | 4 | 26 | Yes | \％ | 25 | 350 | 50，000 | 0 |  | 2）， 000 | 0 | Day | 5 |
| 137 | 25 | 38 | 22 | 4 | 30 | Yes． | 100 | 23 | 432 | 450，000 | \＄50，000 |  | 20，237 | 4，000 | Day－ | 6 |
| 37 | 4 |  |  | 4 | 30 | bYes． | 75 | 25 | 340 | 60，000 | 10，50 |  | 3，600 |  | Eve | 7 |
| 130 | 20 | 30 | 45 | 4 | 30 | Yes． | 100 | 23 | 450 | 250,600 | 0 | c\＄2 1 ， | 23，345 | 1，803 | Day． | 8 |
| 54 | 7 | 7 | 3 | 4 | 36 | bYes． | 50 | 0 | 800 | （d） |  |  | 6，500 | （d） | Day－ | 9 |
| 94 | 12 | 20 | 12 | 4 | 30 | Yes． | 75 |  | 315 | 80,060 |  |  |  |  | Day． | 10 |
| 49 | $t$ | 9 |  | － 4 | 31 | No． | 75 | 25 | a 3\％5 | （ ${ }^{\text {d }}$ ） |  |  |  |  | Day | 11 |
| 135 |  | 24 | $\because 9$ | 4 | $3 \frac{4}{4}$ | bYes． | 150 | 30 | 600 |  | 103， 000 |  |  |  | Day | 12 |
| 213 | 0 | 33 |  | 4 | 33 | bYes | 110 | 10 | 450 | 100， 000 |  |  |  |  | Eve | 13 |
| 105 | 0 | 21 | 22 | 4 | 32 | No | 100 | 0 | 415 |  | 0 |  |  | － | Day | 14 |
| 113 | 16 | 19 | 23 | 4 | 28 | No | 80 |  | 320 | 250,000 | 15，000 |  |  |  | Eve | 15 |
| 30 | 6 | 6 |  | 4 | 33 |  | 109 |  |  |  |  |  |  |  | Ere | 16 |
| 214 | 0 | 54 |  |  | 24 |  | 100 | 30 |  | 50,000 | 0 |  |  |  | Day | 17 |
| 145 |  | 56 |  | 4 | 28 | No | $\%$ | 39 |  |  | 0 |  |  | 5，000 | Day | 18 |
| 68 | 40 | 21 | 1 | 4 | 36 | No |  | 5 | 600 | 30，000 | 0 |  |  | 1．500 | Day | 19 |
| 539 | 41 | 134 |  | 4 | 30 |  | 100 | 0 | 500 | 160，000 | 0 |  |  |  | Day | 20 |
| 230 | 20 | 17 | 1 | 4 | 40 | No | 100 | 25 | 450 |  | 0 |  | 20，293 | 300 | Eve | 21 |
| 110 | $\uparrow$ | ＊ 23 |  | 4 | 26 |  | 100 |  | a 450 |  |  |  |  | 300 | Day． | 22 |
| $\begin{array}{r} 64 \\ 285 \end{array}$ | 4 | $\frac{12}{83}$ | 61 | 4 |  | bYes． | 100 125 | 0 | $\text { a } \underset{505}{495}$ | 20000080 | 50， 0 |  | 6,000 39,500 | 2， 400 | Eve Day | 23 24 |
| 0 | 88 | 21 |  |  | （f） |  | 100 | 10 | 415 |  |  |  |  |  | Day－ | 25 |
| 1，093 | ．．．－ | 208 | 120 | 4 | 36 | bYes． | 150 | 0 | 600 | 350，000 | 0 |  | a 107，000 | a 5， 000 | Day | 26 |
| 32 | 3 | 5 | 1 | 4 | 26 | bres | 75 | 25 | 330 | 10，000 | 0 |  |  | 200 | Day | 27 |
| 93 | 6 | 15 | 20 | 4 | 26 | Yes． | 60 | 25 | a 300 | 18，000 |  |  | 5，000 | 2,000 | Day ． | 28 |

Table 11．—Statistics of schools of

|  | Isocation． | Name of institution． | .8u!̣uedo 7sxy јо «uә | President or dean． | Session closes－ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 且 | 2 | ：3 | 星 | 5 | 6 | ＇\％ |
| 29 | Indianapolis，Ind | Medical College of Indi－ ana，University of In－ dianapolis． | 1869 | Henry Jameson．．．．． | Apr． 6 | $\because 4$ | 20 |
| 30 | Des Mioines，Iowa | Iowa College of Physi－ cians and Surgeons， Drake University． | 1881 | Lewis Schooler， LL．D． | Apr． 24 | 20 | 5 |
| 31 | Iowa City，Iowa． | State University of Iowa， Medical Department． | 1869 | Wm．D．Midaleton， A．M． | Mar． 28 | 12 | 8 |
| 32 | Keokuk，Iowa | Keokuk Medical College， College of Physicians and surgeons． | 1849 | George F．Jenkins， A．M． | Apr． 10 | 14 | 3 |
| 33 | Sioux City，Iowa | Sioux City College of Medicine． | 1889 | H．A．Wheeler，A．M． | Apr． 24 | 13 | 4 |
| 34 | Kansas City， Kans． | College of Physicians and Surgeons，Kausas City University． | 1894 | J．W．May | Apr． 1 | 26 | 4 |
| 35 | Lawrence，Kans． | Univei＇sity of Kansas， School of Medicine． | 1899 | Samuel W．Wiliiston | June \％ | 10 | 4 |
| 36 | Topeka，Kans． | Kansas Medical College．－ | 1890 | John A.M. E. Minney, | Mar． 22 | 20 | 3 |
| 37 | Louisville，Ky | Ficspital College of Medi－ cine，Central Univer－ sity of Kentucky． | 1874 | P．Richard Teylor | June 30 | 10 | 23 |
| 38 | do | Kentucky sichool of Med－ icine． | 1850 | Wm．H．Wathev， A．M，LL．D． |  | 10 | 20 |
| 39 | do | Kentucky University， Medical Department． | 1899 | Thomas C．Evans． | June 30 | 16 | 6 |
| 40 | d | Lonisvillo Medical Col－ lege． | 1869 | C．W．Felly，C．M ．．．． | Mar． 28 | 10 | \％ |
| 41 | do | University of Louisville， Meūical Department． | 183\％ | J．M．Bodine | Mar． 27 | 10 | 11 |
| 42 | New Orleans，La | New Orleans University， Medical College． | 1889 | Harvey J．Clements． | Mar． 2 | 8 | 0 |
| 43 | －do | Tulane University of Louisiana，Medical De－ pardment． | 1834 | Stanior © E．Chaillé， A．M． | May 2 | $\uparrow$ | 9 |
| 44 | Brunswick，Me．． | Medical School of Maine at Bowdoin College． | 1880 | Alfred Mitchell， <br> A．M． | June 2\％ | 12 | 4 |
| 45 | Portland，Me．．．． | Portland Schoolfor Med－ ical Instruction． | 1858 | Charles D．Smith ．．． | Dec． 20 | 13 | 4 |
| 46 | Baltimore，Md | Baltimore Medical Col－ lege． | 1881 | David Streett，A．M ． | Aprr． 17 | 12 | 13 |
| 47 | do | Baltimore University， School of Medicine． | 1884 | Flampson H．Bied． ler，A．M． | Apr． 15 | 9 | 13 |
| 48 | do． | College of Physiciansand Surgeons．＊ | 187\％ | Thomas Opie | Apr． 18 | 13 | 8 |
| 49 | d | Johns Mopkins Medical School． | 1893 | William H．Howell．－ | June 12 | 11 | 28 |
| 50 | do | Maryland Medical Col－ lege． | 1898 | Bernard P．Muse．．． | May 15 | 10 | 7 |
| 51 | －do． | University of Mar yland， School of Nedicine． | 1807 | R．Dorsey Coale ．．．． | $\text { May } 1$ | 9 | 24 |
| 52 | d | Woman＇s Medical Col－ lege． | 1882 | Joseph T．Smith．．．．． | June 1 | 10 | 11 |
| 53 | Boston，Mass ．．．－ | College of Physicians and Surgeons． |  | No report |  |  |  |
| 54 | ．－do | Harvard University， Medical School． | 1789 | William L．Richard－ son． | June 1 | 30 | 92 |
| 55 | d | Tufts College，Medical School． | 1893 | Harold Williams ．．．． | May 27 | 16 | 2 |
| 56 | Ann Arbor，Mich． | University of Nichigan， Departinent of Medi－ cine and Surcery | 1850 | Victor C．Vaughan， Sc．D． | June 21 | 17 | 13 |
| 57 | Detroit，Mich | Detioit College of Medi－ cine and Surgery． | 1869 | Theodore A．McGraw | May 11 | 21 | 33 |

＊Statistics of 1898－99．
$a$ Unde＂certain conditions．
$b \mathrm{~A}$ certificate is given upon completion of the two years＇course．
medicine for the year 1899-1900-Continued.


Table 11.-Siatistics of schools of

|  | Location. | Name of institution. |  | President or dean. | Session closes- | 管 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{1}$ | \% | 8 | 1 | ¢ | 6 | 7 |
| 58 | Detroit, Mich | Michigan College of Med. | 1888 | Hal C. Wyman | Apr. 24 | 5 |  |
| 59 | Grand Rapids, | icine and Surgery. <br> Grand Rapids Medical <br> College | 1897 |  |  | + | 7 |
| 60 | Saginaw, Mich | Saginaw Valley Medical | 1836 | L. W. Elies | May 21 | 6 | 2 |
| 61 | Minneapolis, Minn. | Minneapolis College of Physicians and Sup$\underset{\text { versity. }}{\text { gers. }}$ Hamline Uni- | 1883 | Leo M. Craft | June 6 | 6 | 15 |
|  | do ...-.---.... | University of Mimnesota, College of Medicine and Surgery. | 188\% | Parks Ritchie | Jnne 5 | 36 | 20 |
| 63 | Columbia, Mo.... | Univerary ồ Missouri, Medical Department. | 1873 | A. W. McAlester, A. M., LL. D. | Apr. 7 | 8 | 13 |
| 61 | Kansas City, Mo. | Kansas City Medical College. | 1899 | Andrew L. | Mar. 25 | 20 |  |
| 65 | do | Medico-Chirurgical College. | 1897 | George O. Coffin | Mar. 20 | 20 | 10 |
| 66 | .-.-do | University Medical College. | 1881 | CharlesF. Wainright | Mar. 22 | 32 | 15 |
| 67 | ---- -do ----.- ------ | Woman's Medical College. | 1895 | Nannie P. Lewis, A. M. | Mar. 30 | 4 | 7 |
| 69 | St. Joseph, Mo_ | Central Niedical College - | 1594 | T.E.Potter .-....... | 1 | 18 |  |
| 69 |  | Ensworth Medical Col- lege. | 1888 | Jacob Geige | Mar. 16 | 13 | 2 |
| 70 | St. Louis, | Barnes Medical College .- | 1892 | C. H. Fughes | Apr. 12 | 23 | 6 |
| 71 | .....do . | Beaumont Hospital Dedical College. | 1886 | Fralk J. Lutz, A. M. |  | 20 | 12 |
| 8 | do | Marion Sims College of Medicine. | 1890 | Young H. Bond, A.M. | Apr. 28 | 24 | 6 |
| 8 | do | St. Louis College of Physicians and surgeons. | 18.9 | Waldo Briggs .... | Apr. 10 | 18 | 15 |
| 8 | do | Washington University, Medical Department. | 1840 | John B. Shapleigh, sec. | May 1 | 31 | 14 |
| 5 | Cimaha, Nebr | John A. Creighton Medical College. | 189\% | John P.Lord .-.-- |  | 25 | 10 |
| 86 | . do | Omaha Medical College, University of Omaha. | 1880 | August F. Jonas..... | ay 3 |  | 10 |
| \% | Hanover, N. H... | Dartmouth Medical College. | 1797 | Wm. 'T. Smith, LL. D. | June 26 | 3 | ${ }^{3}$ |
| 18 | Albany, N. Y | Albany Medical College, Union University. | 1838 | Willis G. Tucker | May 1 | 13 | 15 |
| 9 | Brooklyn, N. Y.. | Long Island College Hospital. | 1860 | Jarvis S. Wight, A. M., LL.D. | May 17 |  | 25 |
| 80 | Buffalo, N. Y | University of Buffalo, Medical Department. | 1845 | Matthew D. Mann, A. M. | Apr. 27 |  | 63 |
| 81 | New York, N. Y. | Columbia University, Coilege of Physicians and surgeons. | 1807 | James W. McLane.- | June 13 | 21 | 62 |
| 2 | do | Cornell University, Medcal College, | 1898 | Wm. M. Polk, LL. D. |  | 12 | 37 |
| 83 | -...-do --.------- | University and Bellevne Hospital Medical College. |  | Edward G.Joneway, LL. D. | June 16 | 26 | 38 |
| 84 | Syracuse, N. Y | Syracuse University, College of Medicine. | 1872 | Henry D. Didama, LL. D. |  | 15 | 19 |
|  | Chapel Hill, N. C. | University of North Carolina, Medical School (preparatory). | 1891 | R.H. Whitehead. ... | May 28 | 6 | 1 |
| 86 | Davidson, N.C.. | North Carolina Medical College. | 1893 | John P. Munroe -.... | May 14 | 5 | 1 |
| 87 | Raleigh, N. C | Shaw University, Leon- | 1882 | James McKee | Mar. 17 | 8 | 1 |
| 88 | Cincinnati, )hio- | Cincinnati College of Medicine and Surgery | 1851 | T. V.Fitzpatrick |  | 17 | 5 |

medicine for the year 1899-1900-Continued.


Table 11.-Statistics of schools of


[^116]medicine for the year 1899－1900－Continued．

| Students． |  |  |  | Years in the course. |  |  |  |  | Fees of the entire course． |  |  | r $\stackrel{\circ}{-}$ － $\bigcirc$ is A <br>  \＃ |  | Bound volumes in library. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underset{\text { E }}{\text { d }}$ | $\begin{aligned} & \text { g } \\ & \text { g } \\ & 0 \\ & \hline \end{aligned}$ | $\text { Graduated in } 1900 .$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | 9 | 19 | 是 | 298 | 183 | 起䞨 |  | E 5 | 126 | 宜等 | $\theta$ | 19 | 13） | ¢1 | を號 | 2\％${ }^{\text {2 }}$ |  |
| 231 | 30 1 | 5 58 | 10 | 4 | 28 28 | Yes． | $\$ 20$ 100 | $\$ 25$ 25 | 3285 a 430 | \＄30， 000 |  |  |  | 0 | Day． Day． | 89 90 |
| 116 83 | 5 | 27 24 | － 9 | 4 4 4 | 30 32 | Yes | 100 100 | 25 | 430 $a$ | 20,000 50,000 |  | － | $\$ 11,600$ 9,000 | 300 | Day－ Day－ | 91 |
| 144 |  | 30 |  | 4 | 32 |  | 125 |  |  | 235，000 | 8175， 000 |  |  | 2，500 | Day－ | 83 |
| $22 \%$ | 9 | 50 | 34 | 4 | 28 | Yes | 50 | 10 | a，270 | 63， 000 | 14，000 |  |  | a 500 | Day | 94 |
| 175 |  | 39 | 13 | 4 | 26 | Yes | 50 | 25 | 284 | 50，000 | 0 |  |  | a3，000 | Day | 95 |
| 44 | 4 |  | 2 | 2 | 28 |  | 60 |  |  | （b） |  |  |  |  | Day－ | 95 |
| $7 \%$ | 3 | 18 | 2 | 4 | 32 | Yes． | 80 | 25 |  | 25， 000 |  |  |  | 3， 000 | Day－ | $9 \%$ |
| 58 | 10 | 11 | 10 | 4 | 26 | Yes＿ | 130 | 30 | 395 |  |  |  | 7，370 | a2， 100 | Day－ | 98 |
| 20 | 1. | 5 | 6 | 4 | 24 | Yes． | 75 | 30 | 350 |  |  |  |  |  | Day ． | 99 |
| 639 |  | 105 | 35 | 4 |  | $c$ Yes | 150 | 0 | 605 | 500， 000 |  |  | 93， 000 | 2，600 | Day | 100 |
| 363 |  | 40 |  | 4 | 31 | $c$ Yes | 140 | 25 | 597 |  |  |  |  | a 1，500 | Day | 101 |
| 679 |  | 180 | 151 | 4 | 34 | No | 200 | 0 | 810 |  | 50,000 |  |  | 10，000 | Day－ | 102 |
| 0 | 159 | 26 | 15 | 4 | 29 |  | 129 | 0 | 516 | 122，579 | 276，314 |  | 28，288 | a2， 100 | Day－ | 103 |
| 310 | 7 | 63 | 31 | 4 | 36 | $c \mathrm{Yes}$ | 130 | 0 |  | 100，000 | 0 |  | 37，000 | 700 | Day－ | 104 |
| 116 | 4 | 43 |  | 4 | 26 |  | 100 | ．．．． | c 365 |  |  |  |  |  | Day－ | 105 |
| 212 | 0 | 58 |  | 4 | 26 | Yes＿ | 50 | 30 | a 400 | a 120， 000 | 0 |  |  |  | Day－ | 106 |
| 101 |  | 28 |  | 4 | 26 | Yes． | 60 | 25 | 310 |  | 0 |  |  | 0 | Day－ | 107 |
| 559 |  | 142 | 30 | 4 | 26 | Yes． | 75 | 25 | 350 | 60，000 | 0 |  | 45， 475 | a 200 | Day－ | 108 |
| 169 | 8 | 34 | 22 |  | 24 | Yes＿ | 39 | 10 | 150 | 30，000 | 18，000 | \＄5， 6 | 5，000 | 800 | Day－ | 109 |
| 191 | 3 | 84 | ， | 4 | 26 | $c$ Yes | 100 | 25 | 425 | 40， 1000 |  |  |  |  | Day－ | 110 |
| 224 |  | 84 | 20 | 4 | 26 | Yes | 100 | 25 | 395 |  |  |  | 14， 600 |  | Day | 111 |
| 290 | 0 | 94 |  | 4 | 27 |  | 100 | 25 | 425 | 83,000 | 0 |  | 30，000 | 0 | Day | 112 |
| 180 |  | 80 | 15 | 4 | 24 | Yes | 65 | 25 |  | （b） | （b） |  |  |  | Day | 113 |
| 138 | 3 | 24 | 4 | 4 |  | $c$ Yes | 75 | 25 | 325 | 35，000 | 0 |  | 9，500 | （i） | Day | 114 |
| 148 | 7 | 16 | 6 | 4 | 35 | No． | 0 | 0 | 95 | 288，800 | 0 |  | 45， 160 | a3，000 | Day | 115 |
| 191 |  | 40 |  |  |  |  |  |  |  |  |  |  |  |  | Day | 116 |
| 187 |  | 39 | 21 | 4 | 40 | Yes＿ | 87 | 0 | 350 | （b） |  |  | 13.628 |  | Day | 117 |
| 209 |  | 40 | 23 | 4. | 30 | Yes． | 65 | 30 | 290 | 125， 000 |  | 5,0 | 16，194 | 250 | Day | 118 |
| 241 |  | 61 | 19 | 4 | 31 | No． | 85 | 30 | 370 | 65， 000 |  |  |  | 250 | Day－ | 119 |

[^117]Table 11.-Statistics of schools of

|  | Location. | Name of institution. |  | President or dean. | $\underset{\substack{\text { Session } \\ \text { closes- }}}{ }$ | 管 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | : | 3 | 4 | $\pm$ | 6 |  |
| 120 | Milwaukee, Wis | Milwaukee Medical Col- | 1894 | W.H. Earle | May | 24 |  |
| 121 | .do . | lege. <br> Wisconsin College of Physicians and Surgeons. <br> ECLECTIC AND PHYSIOMEDICAL. | 1893 | A. H. Leving | Apr. | 20 |  |
| 122 | Atianta, Ga | Georgia Coilege of Eclectic Medicine and Sur- | 1839 | A. G. Thomas | Apr. 1 | 10 |  |
| 123 | Chicago, Ill | Benuett College oî Ec- <br> lectic Medicine and surgery | 1868 | A. L. Clark, A. M | May 10 | 30 |  |
| 124 | do | Surgery. <br> Chicago Physiomedical | 1891 | H. P. Nelson | Apr. 20 | 32 |  |
| 125 | Indianapolis,Ind. | Plysiomedical College of Indialla. | $18 \% 3$ | N.D. Woodard | Mar. 21 |  |  |
| 128 | St. Louis, Mo | American Medical Col- | 1573 | E. Younkin | Apr. 2 | 3 |  |
| 127 | Lincoln, Nebr ... | Lincoin Medical College | 1889 | W.S. Latt | Mar. 15 | 24 |  |
| 128 | New York, N. Y | Eclectic Medical College of the City of New Yoriz. | 1865 | George W.Borkowitz | May 1 | 1: |  |
| 129 | Cincinnati, Ohio | Eclectic Medical Institute honeopathic. | 1845 | Fied. J. Locke . ...... | Apr. 9 | 15 |  |
| 130 | San Francisco, | Hahnemann Hospital | 1884 | James W. W | May - | 19 | 1 |
| 131 | $\qquad$ | Den ${ }_{\text {Coger }}$ Homeopathic | 1893 | James P. Willar | May - | 17 |  |
| 132 | Chicago, Ill | Chicago Homeopathic | 18\%6 | N. B. Delamate | Apr. 24 | 4 |  |
| 133 | do | Dunharu Medical College | 1895 |  |  | 34 | 3 |
| 134 | do | Hahnemann Medical College. | 1860 | E. Stillinan Bailey | $\text { Apr. } 26^{\circ}$ | 19 | 26 |
| $\begin{aligned} & 135 \\ & 136 \end{aligned}$ |  | Hering Medical College-- National Medical Uni- | $\begin{aligned} & 1899 \\ & 189 \end{aligned}$ | Henry C. Allen <br> Julia Holmes Smith | Apr. 10 | 188 |  |
| 137 | Iowa City, Iowa | versity. <br> State University of Iowa, Homeopathic Medical Departinent. | 1877 | George Royal....---- | Mar. 31 | 1:2 |  |
| 138 | Louisville, Ky | Department. <br> omeo- | 1893 | A. Leight Mionroe ... | Apr. 3 | 17 |  |
| 139 | Baltimore, Md | Southern Homeopathic | 1891 | George T. Shower- | May 4 | 10 |  |
| 140 | Boston, Mass | Boston University School | 18\%: | John P. Sutherland | June 6 | 2 |  |
| 141 | Ann Arbor, Mich | University of Michigan, Homeopathic Medical College. | 1875 | Wilbert B. Hinsdale | June 21 | 2 |  |
| 142 | Detroit, Mich-- | Detroit Homeopathic Medical College | 1899 | D.A. MacLachlan.. | May | 20 |  |
| 143 | $\begin{aligned} & \text { Minneapolis, } \\ & \text { Minn. } \end{aligned}$ | University of Minnesota, College of Homeopathic Medicine and Surgery | 1888 | A.P. Williamson. | June 6 | 15 |  |
| 144 | Kansas City, Mo. | Hahnemann Medical Col. lege of Kansas City University. | 1896 | W. H. Jenney .-... | Mar. 27 | 16 |  |
| 145 | do -..........- | Kansas City Homeo- | 1888 | A.E. Neumeiste | do | 0 |  |
| 146 | St. Louis, Mo. | Homeopathic Medical Coilege of Missouri. | 1857 | W. C. Richardson | Apr. 12 | 1 |  |

medicine for tihe year 1899-1900-Continued.


[^118] $c$ Under certain conditions.

TABLE 11.-Statistics of schools of

|  | Location. | Name of institution. |  | President or dean. | Session closes- |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  |  | MOMEOPATHIC-cont'd. |  |  |  |  |  |
| 147 | New York, N. Y | New York Homeopathic | 1850 | Wm. Tod Helmuth.. | May 4 | 27 | 13 |
| 148 | do | New York Medical Col- <br> lege and Hospital for | 1863 | M. Belle Brown. | Apr. 13 | 18 | 13 |
|  |  | Women. Pulte Medical College .- |  |  |  |  | 9 |
| 150 | Cleveland, Ohio.- | Cleveland Homeopathic | 1850 | Gaius J.Jon | Apr. 10 | 25 | 9 |
| 151 | Philadelphia, Pa. | Hahnemann Medical College. | 1848 | Pemberton Dudley, LL. D. | May 17 | 16 | 33 |

medicine for the year 1899-1900-Continued.


Table 12.-Statistics of schools of

|  | Location. | Name of institution. |  | President or dean. | 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 12 | 3 | 4 | 5 |
| 1 | Birmingham, Ala | Birmingham Dental Col | 1893 | T. M. A | May 1 |
| 2 | Los Angeles, Cal. -- | University of Southern California, College of Dentistry. | 1837 | Edgar Paimer | June 15 |
| 3 | San Francisco, Cal. | College of Medicine and Surgery, Dental Department. | 1899 | Alfred E. Blake. | May 1 |
| 4 | do | College of Physicians and Surgeons. Dental Dept. | 1897 | Charles Boxton | June 28 |
| 5 | do | University of California, College of Dentistry. | 1881 | Louis L. Dunbar | May 31 |
| 6 | Denver, Colo | Colorado College of Dental Surgery. | 1806 | W. T. Chambers | Apr. 23 |
| 7 | .do | University of Denver, Dental Department. | 188\% | Lloyd S. Gilbert | Apr. 30 |
| 8 | Washington, D. C. | Columbian University, Dental Department. | 1886 | J. Hall Lewis | May 1 |
| 9 | do | Howard University, Dental Department. | 1881 | Rokert Reyburn | May |
| 10 |  | Washington Dental College*- | $1897$ | William N. Cogan | $\text { May } 1$ |
| 11 12 | Atlant | Atlanta College of Physicians and Surgeons, Dental Dept.* Atlanta Dental College* | 1887 1893 | S. W. Foster <br> William Crens | $\begin{aligned} & \text { Apr. } 30 \\ & \ldots \text { do... } \end{aligned}$ |
| 13 | Chicago, Inl | Chicago College of Dental Surgery, Lake Forest University. | 1883 | Truman W. Brophy, <br> LL. D. | May 3 |
| 14 |  | Illinois School of Dentistry .- | 1893 | Frank N. Brown -..... |  |
| 15 | do | Northwestern University, Dental School. | 1889 | G. V. Black, Sc. D.,Lu.D. | May ~ |
| 16 | Indianapolis, I | Central College of Dentistry - | 1897 | Milton F. Ault | May 3 |
| 17 | Iowa City, | Indiana Dental College | 1879 | George E. Hunt .......... | May 7 |
| 18 | Iowa City, Iowa | State University of Iowa, Dental Department. | 1881 | William S. Hosford .-.-- | June 4 |
| 19 | Kookuk,Iowa | Keokut Dental College ….. | 1897 | B. C. Hinkley |  |
| 20 | Louisville, Ky | Louisville College of Dentistry. | 1886 | W. E. Grant. | May 9 |
| 21 | New Orleans, La .- | New Orleans College of Dentistry. | 1899 | Jules J. Sarrazin | Juno 4 |
| 22 | Baltimore, M | Baltimore College of Dental surgery. | 1839 | M. W. Foster . | May 1 |
| 23 | .-.--do | Baltimore Medical College, Dental Department. | 1895 | William A. Montell | May 6 |
| 24 | --- do ------------ | Unirersity of Maryland, Dental Department. | 1885 | Ferdinand J.S. Gorgas, A.M. | Apr. 30 |
| 25 | Boston, Mass....... | Harvard University, Dental School. | 1867 | Eugene H.Smith .-.-...- | June 28 |
| 26 | -do | Tufts College, Dental School. | 1868 | Harold Williams | June 20 |
| 27 | Ann Arbor, Mich.- | University of Michigan, College of Dental Surgery. | 1875 | J. Taft | --do... |
| 28 | Detroit, Mich | Detroit College of Medicine, Dopartment of Dental Surgery. | 1891 | Theodore A. McGiaw, A. M. | June 14 |
| 29 | Minneapolis, Minn. | University of Minnesota, College of Dentistry. | 1888 | Wm. P. Dickinson .-.-.-- | June 1 |
| 30 | Kansas City | Kansas City Dental College.. | 1881 | J. D. Patterson | $\begin{array}{ll} \text { May } \\ \text { Apr } \end{array}$ |
| 31 | --. do ---.-. | Western Dental College * | 1890 | Drury J. McMillen ....... | $\text { Apr. } 4$ |
| $3 ;$ | St. Louis, Mo | Marion Sims College of Medicine, Dental Department.* | 1894 | Young H. Bond, A. M.... | Apr. 19 |
| 33 | do | Missouri Dental College, Washington University. | 1866 | Albert H. Fuller. | Apr. 27 |
| 34 | Lincoln, Nebr | Lincoln Dental College....... | 1889 | W. Clyce Davis. | $\begin{aligned} & \text { Apr. } 15 \\ & \text { May } \end{aligned}$ |
| 35 | Omaha, Nebr. | University of Omaha, Dental Department. | 1804 | A. O. Hun' | May 2 |
| 36 | Buffalo, N. Y ...... | University of Buffalo, Dencal | 1892 | W. C. Barrett -.-...--- | May 15 |
| 37 | New York, N. Y . | New York College of Dentistry. | 1866 | Fanueil D. Weisse..-.... | May 14 |
| 38 |  | New York Dental School.... | 1893 | Charles M. Ford | $\text { May } 8$ |
| 39 | Cincinnati, Ohio..- | Cincinnati College of Dental Surgery. | 1893 | G. S. Junkerman | Apr. 5 |

* In 1893-99.
dentistry for the year 1899-1900.

$b$ In common with the university

Table 12.--Statistics of schools of

|  | Location. | Name of institution. |  | President or dean. | 1 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | $9^{9}$ | 3 | 4 | 5 |
| 40 | Cincinnati, Ohio... | Ohio College of Dental Sur- | 1846 | H. A. Smith | May |
| 41 | Cleveland, Ohio ... | Western Reserve University, | 1892 | H. L. Ambler. | June 15 |
| 42 | Columbus, Ohio... | Dental Departinent. <br> Ohio Medical University, | 1892 | Otto Arnold | Apr. 24 |
| 43 | Portland, Oreg | North Pacific Dental College. | 1899 | S. J. Barber | May 1 |
| 44 | Philadelphia, Pa. | Medico-Chirurgical College, Dental Department. | 1897 |  | Apz. 30 |
| 45 | . do | Pennsylvania College of Dental Surgery. | 1856 | Wilbur F. Leitch | May 1 |
| 46 | do | Philadelphia Dental College -- | 1863 | S. H. Guilford, A. M | $\text { May } 4$ |
| 47 |  | University of Pennsylvania, Department of Dentistry. | 1878 | Edward C. Kir | June 15 |
| 48 | Pittsburg, Pa.... | Pittsburg Dental College, Western University of Pennsylvania. | 1896 | George L. Simpson...... | May 1 |
| 49 | Nashville, Tenn | Central Trennessee College. Meharry Dental Department. | 1886 | G. W. Hubbard | Feb. 21 |
| 50 | . do | University of Temnessee, Dental Department. | $18 \%$ | J. P. Gray -- | May 1 |
| 51 | do | Vanderbilt Universitv, Department of Dentistry. | 1879 | D. R. Stubblefield . | May \% |
| 52 | Richmond, Va | Virginia School of Dentistry, Medical College of Virginia | 1897 | Christopher Tompkins . | May 10 |
| 53 | do | University College of Medicine, Dental Department. | 1893 | J. Allison Hodges........ | May 2 |
| 54 | Milwaukee, Wis . | Milwaukee Medical Coilege, Dental Department. | 1894 | George V.I. Brown. | Apr. 5 |

dentistry for the year 1899－1000－Continued．

| $\begin{aligned} & \dot{\infty} \\ & 0 \\ & 0 \\ & 0 \\ & \text { on } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 范 | Students． |  |  |  | －əsxnoo өघৃ u！suro |  | $\begin{aligned} & \text { 芯 } \\ & \text { 菖 } \\ & \text { E } \end{aligned}$ | $\begin{aligned} & \text { Graduation or exami- } \\ & \text { nation fee. } \end{aligned}$ | H \＃ ت <br> 2 8 8 1 |  |  | $\begin{aligned} & \text { Benefactions received } \\ & \text { during the year. } \end{aligned}$ |  | ＊感 쿨 ․ <br>  | Bound volumes inlibrary． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { gi } \\ \stackrel{y}{3} \end{gathered}$ | $\begin{aligned} & \text { घं } \\ & \text { हैं } \\ & \text { B } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | \％ | 8 | （1） | 吾 1 （1） | 1直 | 12 | 48 | 318 | 13 3 | 16 | 退学 | 显多 |  | 290 | 兛 | \％\％ |  |
| 7 | 4 | 196 | 6 | 62 |  | 3 | 30 | \＄100 |  | \＄305 |  |  |  |  | Day ． |  | 40 |
| 10 | $\frac{1}{4}$ | 91. | 0 | 30 | 1 | 3 | 32 | 100 | $\$ 10$ | 335 |  |  |  |  | Day． |  | 41 |
| 15 | 4 | 180 | 3 | － 42 | 4 | 3 | 23 | 50 | 10 | c， 200 | 833．000 | \＄11，000 | 0 |  | Day－ | 500 | 49 |
| 13 | ${ }_{4}^{4}$ | ${ }_{7}^{73}$ | 2 | 95 | 2 | 3 | 32 | 100 | 20 | 335 |  |  |  | \＄10，000 | Day | 1560 | 43 |
| 13 | 20 | 118 | ．．．． | 23 | 2 | 3 | 30 | 100 | 25 | 350 |  |  |  |  | Day | 1，560 | ： |
| 8 | 25 | 321 | 11 | 125 | 9 | 3 | 30 | 100 | 30 | 345 | 33,000 |  |  |  | Day |  | 45 |
| 6 | 3 | $3 \%$ | 14 | 105 |  | 3 | 30） | 115 | 35 | 370 | 150，000 |  |  |  | Day |  | 46 |
| 9 | 5 | 484 |  | $14 \frac{1}{2}$ |  | 3 | 37 | 100 | 30 | 345 | 245，000 | 0 |  |  | Day |  | $4 \%$ |
| 7 | 10 | 180 | 6 | 57 |  | 3 | 28 | 100 | 30 | 360 |  |  |  | 19，000 | Day |  | 48 |
| 7 | 2 | 18 | 1 | 2 | 1 | $\frac{1}{2}$ | 21 | 39 | 10 | 140 |  |  |  | 500 | Day |  | 9 |
| 9 | 5 | $10 \%$ | 1 | 25 | $1 \%$ | 3 | 28 | 110 | 25 |  | 23， 000 | 0 | 0 | 12， 500 | Day－ |  | 50 |
| 9 | 10 | 133 | 2 | 40 | 0 | 3 | 28 | 100 | $\because 5$ | 360 |  |  |  |  | Day－ |  | 51 |
| 9 | 4 | 22 | －－－－ | 5 |  | 3 | 30 | 65 | 30 | 283 |  |  |  |  | Day ． |  | 52 |
| 10 | 7 | 34 |  | 6 |  | 3 | 31 | 85 | 30 | 285 | $6{ }^{5}, 000$ |  |  |  | Day |  | 53 |
| 11 | 8 | 153 |  | 35 | 0 | 3 | 28 | 110 | 10 | 340 | 150，000 | 0 | 0 |  | Day－ | 500 | 51 |

a Approximately．

Table 13.-Statistics of schools of

pharmacy for the year 1892－1000．

|  |  | Students． |  |  |  |  |  |  | $$ |  |  |  |  |  |  | ${ }^{4}$ <br> 合 <br>  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 른 | $\begin{aligned} & \text { घं } \\ & \text { y } \\ & \text { है } \end{aligned}$ | $\text { Graduated in } 1900$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ¢ | 8 | 6 | 9 | 319 | 11 | 18 |  | 夏宔 | 1.5 | 18 | \％ 7 | 18 | 19 | 139 | 911 | \％${ }^{\text {P }}$ | 9：3 |  |
| 1 | 1 | 37 | 0 | 6 | 0 |  | 36 | 0 | 0 | \＄12 | S48 |  |  | 0 |  | Day ． |  | 1 |
| 3 | 1 | $1 i$ |  | 1 |  | 2 | 26 | 0 | \＄50 | 10 | $1: 2$ |  |  |  |  | Day |  | 2 |
| 3 | 6 | $7 \%$ | 4 | 35 | 2 | 2 | 30 | 4 | 100 | 20 | 230 | 860， 000 | 0 | \＄1，500 | 89,500 | Day－ | a30n | 3 |
| 5 | 7 | 29 | \％ | 9 | 0 | 2 | 28 | 4 | $\%$ | 25 | 195 | 60， 010 |  |  |  | Eve |  | 4 |
| 4 | 3 | 26 | 0 | 13 | 2 | 2 | 28 | 4 | 70 | 0 | 140 |  |  |  |  | Eve |  | 5 |
| 4 | 2 | 54 | 4 | 11 |  | 3 | 26 | 4 | 60 | 0 | 185 | 15,000 | 0 | 0 | a3， 500 | Eve | 350 | 6 |
| 2 | 2 | 34 |  | 5 |  | 2 | 20 |  | 65 | 15 | 140 |  |  | 0 |  |  |  | 7 |
| 4 | 4 | 141 | 5 | 40 | 1 | 2 | 30 | 2 | 75 | 5 | 155 |  |  |  | 11，000 | Day | 1，800 | 8 |
| 6 | 2 | 227 | 8 | 18 |  |  | 40 | 0 |  |  |  | a\％5，000 |  |  |  | Day | аรัธั | 9 |
| 3 | 3 | 81 | 0 | 23 | 0 | 2，4 | $3 \%$ | 0 | ct50 | 5 |  |  |  |  |  |  |  | 10 |
| $\overline{5}$ | 2 | 10 |  | 4 | 1 | 2 | $4: 3$ | 0 | 100 | 10 | 250 |  |  |  |  | Day－ | （b） | 11 |
| 8 | 6 | 110 | 5 | 80 | 3 | 2,4 | 25 | 0 | 3.5 | 5 | \％$\%$ |  |  |  |  | Day |  | 13） |
| 9 | 6 | 250 | 30 | 85 |  | 2 | 24 | 0 | 50 | 10 | 135 |  |  |  |  | Day |  | 13 |
| 4 | 4 | 36 |  | 15 | 5 | 2 | 25 | 0 | $6: 3$ | 2） | 142 | （b） | 0 | 0 | 0 | Day | （b） | 1.1 |
| 5 | j | 49 | 4 | 16 | 0 | 2 | 26 | 0 | $7 \%$ | 0 | 150 |  |  |  |  | Day |  | 15 |
| 6 | 6 | 75 | 4 | 21 |  | 2 | 40 | 2 | 0 | 5 | 76 |  |  |  |  | Day． |  | 13 |
| 8 |  | 45 | 0 | 8 | 15 | 2 | 24 | 4 | $\%$ | 10 | $1 \% 0$ | 20,000 | 0 | 0 |  | Day ． | 2600 | 17 |
| 3 | 3 | 98 | 3 | 9 |  | 2 | 26 | 2 | 60 | 20 | 135 |  |  |  |  | Day |  | 18 |
| 12 | 9 | 10 |  | 3 | 0 | 2，$\frac{1}{2}$ | 33 | 1,3 | 3） | 3 | $\{140\}$ |  |  | 0 |  | Day |  | 19 |
| 4 | 2 | 98 |  | 47 |  | 2 | 32 |  | 80 | 15 | 185 | 20，000 | 0 |  |  | Day |  | 20 |
| 5 | 7 | $1 \%$ | 12 | 19 | 3 | $\infty$ | 31 | 4 | 100 | 10 | （2003 | 69,300 | 314，215 | 0 | 14，8．11 | Day－ | c5，13： | 21 |
| 11 | 6 | 63 | 11 | 29 | 0 | 2，4 | 36 | 0 | 3.5 | 10 |  | （b） |  |  |  | Day－ | a5，000 | $2 \geqslant$ |
| 5） | 2 | $4 \%$ | 2 | $\because 0$ |  | ＊ | 36 | 0 | 60 | 10 | 130 |  |  |  |  | Eve |  | 93 |
| $\because$ | 5 | 57 | $\%$ | $1 \%$ | 9 | 2 | 33 | 0 | $\%$ | 10 | 165 |  |  |  |  | Day ． |  | 24 |
| 6 | 4 | $3 \%$ | 2 | 7 |  | 2 | 26 | 3 | 60 | 10 | $14 \%$ | （） | 0 | 0 |  | Eve |  | 23 |
| 5 | 5 | 145 | 3 | 50 |  | 2 | 28 | 4 | 66 | 10 | c150 | 35,000 | 0 |  |  | Eve |  | 88 |
| 5 | 3 | $2 \%$ | 2 | 8 | 0 | 2 | 30 | 4 | 7.5 | 15 | $1 \% 0$ | 0 |  | 0 | 3，060 | （c） |  | 27 |
| 3 | 4 | 78 | 1 | 30 |  | 2 | 23 | 4 | 60 | 1） | 138 | 0 | 3， $48 \%$ | 0 | 4，7\％8 | Eve |  | 28 |
| 5 | 6 | 123 | 6 |  | 0 | 2 | $3 \%$ | 4 | $\%$ | 10 | 155 | （） | 1，500 | 0 | \％，1 $\sim 2$ | Day | $a 1,500$ | 29 |
| 5 | 12 | 94 | 5 | 37 | ${ }^{\circ} 0$ | $\stackrel{\sim}{2}$ | 28 | 0 | 60 | 10 | 133 | 0 | 0 |  |  | Day |  | 39 |
| 8 | 5 | 3010 | 13 | 97 |  | 2 | 27 | 4 | 100 | 10 | 210 | 204,242 | 0 |  |  | Day | a5， 087 | 31 |
| 6 | 2 | 2） |  | 1 | 0 | 2 | $3: 3$ | 4 | 85 | 3 | 88 |  |  |  |  | Day ． |  | 32 |
| 1 | －－－－ | 10 |  | （5 |  | 3 | $\therefore 1$ | 0 | 25） | 1） | 106 | 2，500 |  |  | 696 | Day |  | 33 |

Table 13.-Statistics of schools of


* In 1898-99.
(a Approximately.
pharmacy for the year 1899-1900-Continued.

$b$ In common with the university.
$c$ Afternoon and evening.

Table 14.-Statistics of schools of

|  | Location. | Name of institution. |  | President or dean. | Session closes- |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | E | 18 | 3 | 4 | 5 |
| 1 | San Francisco, Cal | University of Caliiornia, Vet- | 1893 | Frank W. Skaife | Apr. 1 |
| 2 | Washingion, D. C.- | United States College of Veterinary Surgeons. | 1884 | C. Barnwell Pobinson. | Apr. 10 |
| 3 | Chicago, Ill. --. | Mckillip Veterinary Collese. | 1894 | E. Meriliat. | Apr. 1 |
| 4 | Indianapolis, Ind.. | Indiana Veterinary College.. | 1892 | Sammel E. Crose, A. M.. | Mar. 8 |
| 5 | Ames, Iowa ..-.... | Iowa State College of Agriculture, Veterinary Department. | 1879 |  | June 13 |
| 6 | Boston, Mass......- | Harvard University, School of Veterinary Medicine. | 188: | Charies P. Lyman. .-.... | June 28 |
| 7 | Grand Rapids, Mich | Grand Rapids Veterinary College. | 189\% | Leonard L. Conkey ..... | Apr. 5 |
| 8 | Kansas City, Mo..- | Kansas City Veterinary College. | 1891 | S. Stewart. | Mar. 15 |
| 9 | Ithaca, N. Y........ | New York State Veterinary College at Cornell University. | 1896 | James Law | June 22 |
| 10 | New York, N. Y -- | New York American Yeterinary College. | 1857 | A. F. Liautard | Mar. 31 |
| 11 | Columbus, Ohio...- | Ohio State University, Col lege of Veterinary Medicine. | 1884 | David White | June 15 |
| $1 \%$ | Philadelphia, Pa... | University of Pennsylvania, Department of Veterinary Medicine. | 1884 | Leonard Pearson...-...- | June 14 |
| 13 | Pullman, Wash ....- | Washington Agricultural College, School of Veterinary Science. | 1897 | Sofus B. Nelson .-....-.-. | June 21 |

a Afternoon and evening.
veterinary medicine for the year 1849－1900．

|  |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Instruction in day or } \\ & \text { evening. } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \dot{\text { g }} \\ & \text { 密 } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | $\%$ | 8 | Э | 1 10． |  | 最 | 18 | 1退 | 目面 | 16 | 18 | 18 | E93 | Pa | \＄是 |  |
| 7 |  | 2 | －． |  | 3 | 26 | \＄100 | 325 | \＄335 | \＄35，000 |  |  |  |  | Day ．－ | 1 |
| 11 | 1 | 17 | 4 | 0 | 3 | 26 | 70 | 0 |  |  |  |  | \＄650 | 300 |  | 2 |
| 11 | 4 | 63 | 21 | 3 | 3 | 21 | 75 | 10 | 240 | 75，000 |  |  |  | 709 | Day | 3 |
| 9 | 10 | 20 | 13 | 3 | $\stackrel{3}{2}$ | 27 | 75 | 20 |  |  |  |  |  |  | Day | 4 |
| 7 | 5 | 42 | 7 | 0 | 3 | 32 | 0 | 0 | 10 | 6，090 |  | 0 |  |  | Day ． | 5 |
| 9 | 13 | 25 | 7 | － | 3 | 36 | 150 |  | 450 | 9，000 | 85，06！ |  | 23， 339 |  | Day ． | 6 |
| 19 | 2 | 18 | 8 | 3 | 2 | 24 | 50 | － 25 | 155 | 25， 000 |  | 0 | 1，400 |  | Day | 7 |
| 23 | 0 | 31 | 8 | 0 | 3 | 20 | 80 | 10 | 250 | 0 | 0 | 0 | 2，480 |  | （a） | 8 |
| 4 | 4 | 30 | 7 |  | 3 | 40 | 0 | 5 |  | 150，000 |  |  |  |  | Day | 9 |
| 15 | 7 | 35 | 8 | 0 | 3 | 26 | 115 | 25 | 370 | 0 | 0 | 0 | 3，080 |  | Both | 10 |
| 8 | 6 | 22 | 6 | 2 | 3 | 36 | 0 | 5 | 70 |  |  |  |  |  | Both | 11 |
| 7 | 5 | 51 | 11 | 3 | 3 | 33 | 100 |  | 325 | 75,000 |  | \＄ 1,000 | 5， 000 |  | Day ．－ | 12 |
| 3 | 4 | 3 | 0 | 0 | 3 | 36 | 0 | 0 | 15 |  |  |  |  |  | Day ．－ | 13 |
|  |  |  |  |  |  |  |  | － |  |  |  |  |  |  |  |  |

Table 14.--Statistics of training schools for nurses for the year 1890-1900.


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| \＄100 | i－ | \％${ }^{10}$ |  |  | 15 |  |  | ［ －$^{\text {a }}$ |  |  |
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| $0 \times 000$ | 820 | 2002es | 22000 | a | cos |  |  | 20： 90 |  |  |
| － | $7^{\circ}$ | $\infty+0$ | 000 |  | 二ニ |  | 〇or－ | － | － | 9 |
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| 泉 |  |  |  |  | $\overbrace{0}^{2}$ | $\begin{aligned} & \text { ? ? } \\ & \text { 员 } \\ & \text { an } \end{aligned}$ |  |  |  |  |
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|  | 8\% |  | 莀 |  | 8' |  |  | 0 웅 |  |  |

Table 14.-Statistics of training schoots for nirses for the year 1899-1900-Continued.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \mathscr{4} \\ & \ddagger \\ & \vdots \end{aligned}$ | $$ | $\begin{gathered} 0 \\ \text { n } \\ \text { H } \\ \underset{\sim}{1} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Location. | Name of school. | Year of first opening. | Superintendent of school. | Session closes | 豆 | $\begin{aligned} & \dot{\text { gं }} \\ & \text { घ } \\ & \text { है } \end{aligned}$ |  |  |  |  |  |  |  |  | 若 |  |
|  | 1 | 12 | 3 | 4 | 5 | 6 | 7 | 9 | 9 | 10 | 111 | 12 | 18 | 14 | 15 | 16 | $1 \%$ |
| 54 58 | Chicago, Ill .-.-------- | St. Luke's Hospital Wesley Hospital | 1884 1888 | Augusta C. Robertson. <br> Fmma C Wilson | (a) | 0 | 47 16 | 18 9 | 3 , | 84 4 | $\$ 4$ 6 | \$4 | 172 30 |  | \$2\%\%.000 | 0 |  |
| 58 | . do | Wesley Hospital -- | 1888 | Emma C. Wilson Anna L. Davis | Apr. <br> June 0 |  | 16 35 | 9 13 | $\underset{\sim}{2}$ | 4 | 6 |  | 30 125 | 350,000 75,000 | 0 | 0 |  |
| 60 | do | Woman's Hospital * | $188: 2$ | Ella II. Morse |  | $1)$ | 23 | 16 | : | 0 | 0 |  | 45 |  |  |  |  |
| 61 | East St. Louis, | Henrietta Hospital | 1895 | Jeanne Newington.. | (a) | 0 | 7 | 3 | 2 | 8 | 10 |  | 50 | 20,000 | 0 | 0 |  |
| 62 | Elgin, Ill | Sherman Hospital | 1888 | Harriet L. Gerhard. |  | 0 | 11 | 4 | 2 | 0 | (b) |  | 30 | 35, 000 | 0 | \$300 |  |
| 63 | Evanston, Ill | Evanston Hospital | 1899 | Annie L. Locke .-... | .Tune 30 | 0 | 4 | 0 | 2 | 0 | (b) |  | 19 | 34,000 | 0 | 25,000 |  |
| 64 | Galesburg, $111 .--. .$. | Galesburg Hospital | 1894 | Christina NacLennan. | May 1 | 0 | 9 | 5 | 2 | 4 | 6 |  | 21 |  |  |  |  |
| 65 | Peoria, Ill | Cottage Hospital | 1894 | Eleanor J. Coolidge. | May 10 |  | 12 | 4 | 2 | $\bigcirc$ | 9 |  | 45 | 30,000 | 60,000 | 55, 000 |  |
| 64 | Quincy, Ill | Blessing Hospital | 1831 | Mary C. Wheeler -... |  | 0 | 12 | 5 | 2 | 8 | 10 |  | 37 | 30, 600 | 1\%,000 | 1,250 |  |
| 67 | Rockford, In - - - - - | Rockford Hospital | 1889 | Eliza C.Glenn .- | June 7 | 0 | 11 | 5 | $\stackrel{\sim}{2}$ | 8 | 13 |  | 30 | 2;, 044 | 17, |  |  |
| 68 | Evansville, Ind ...... | Evansville Sanitarium .... | 1894 |  | (a) |  | \% | 3 | 3 | 8 | 10 | 10 | 20 | 30, 000 | $1)$ | 0 |  |
| 69 | ---do do-------------- | St. Mary's Hospital | 1893 | Sister Regis - .-. - - | Tune 30 | 0 | 14 | 3 | 3 | 5 | 5 | 5 | 100 | 150,000 |  |  | \$980 |
| 70 | Fort Wayne, Ind | Hope Hospital -- | 1897 | Mrs. E. G. Tournier . | Oct. 1 |  | 8 | 8 | $\ddot{3}$ | 0 | 0 |  | 40 | 50,000 | 0 | 0 |  |
| 71 | Indianapolis, Ind .... | City Hospital* | 1896 | Alice Ashly .-.------ | June - | 0 | 28 | 11 | 3 | 4 | 4 | 4 | 135 | --- |  |  |  |
| 72 | Lafayette, Ind.-....- | Home Hospital. | 1889 | Mary B. Sollers .-. -- | June - | -.. | 6 |  | 2 | 4 | 4 |  | 14 | 9,000 |  |  |  |
| 73 | South Bend, Ind. | Epworth Hospital | 1894 | Maggie Brennan --.- | May 31 |  | 6 | 4 | 2 | 6 | 6 |  | P0 | 15,009 |  |  |  |
| 74 | Burlington, Iowa | Burlington Hospital | 1897 | C. C. Keeler ---- --- - | June 1 | 0 | 13 | 3 | 3 | 5 | 9 | 1: | 40 | 25, 000 | 0 | 0 |  |
| 75 | Cedar Rapids, Iowa - | St. Luke's Hospital | 1892 | Beatrice B. Barter.-. |  |  | 9 | 3 | 2 | 8 | 10 |  | 22 |  |  |  |  |
| 76 | Council Bluffs, Iowa. | Women's Christian Association Hospital. | 1890 | Madge E. Penny --.- | June -- | --- | 10 | 3 | 2 | 5 | 5 |  | 50 | 15,000 |  | 350 | 2,000 |
| $\square$ | Davenport, Iowa .-.- | St. Luke's Mospital .-- - .-. | 1895 | Emma J. Vincent...- | June 1 | 0 | 14 | $t$ | $\because$ | 5 | 8 |  | 30 | 30,000 | 7,000 | 2,000 | 2,500 |
| 78 | Dubuque, Iowa ----- | Finley Hospital --------- | 1898 | Ada J. Tayloe.------ | Mar. 5 |  | 12 | 12 | 2 | 5 | 5 |  | 50 | 50,000 | 75,000 | 0 | 1,000 |
| 79 | Iowa City, Iowa --.-- | Homeopathic Hospital, Iowa State University. | 1888 | Mary A. Raff ----.--- | Mar. \%8 | 1 | 15 | 3 | 3 | 0 | 8 | 10 | $5 \cdot 4$ | 50,000 | 0 | 0 |  |
| . 80 | do | Iowa State University Hospital. | 1898 | Florence E. Brown -- | Apr. 1 | 0 | 13 | 4 | 3 | 5 | 8 | 10 | 50 | 55,000 |  | 0 |  |
| 81 | Kansas City, Kans. | Bethany Hospital. | 189: | Renette Hill | May 31 |  | 20 | 1 | 3 | 6 | 6 | 8 | 51 | 20.000 | 0 | 0 |  |




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| $8$ |  |  |  |  | 侖 | $\begin{array}{l:c} B_{8}^{8} \\ 80 & 0 \\ 0 \end{array}$ |  |  |  |
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| 9 오룩 |  |  |  |  |  |  |  |  |  |
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Table 14.-Statistics of training schools for nurses for the year 1899-1900-Continued.



| i＝： | $\stackrel{9}{2}$ | 1 | 100：－ |  |  |  |  | $\overbrace{\pi}^{290000}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| $2-\infty 000^{-0} 20$ | 0 coioi－so | Soiso．en－i－ | $\mathrm{Q}^{\text {i－}}$－ | $\infty 00200$ | $\ominus_{1}^{c}$ | $\infty$ |  | $20: 00$ | O | $\infty$ |
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|  | $3$ |  |  |  |  | $+\frac{1-1}{+0}$ | $\begin{aligned} & \text { B } \\ & \text { D } \\ & \text { I } \\ & \underset{D}{D} \end{aligned}$ |  |  | $\begin{aligned} & \text { Gi } \\ & \text { © } \\ & \text { A } \\ & \underset{\sim}{3} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 80 \\ 80 \\ 0 \\ 0 \\ \text { A } \\ \text { 8 } \\ \text { z } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |




TABLE 14.—Statistics of training schools for nurses for the year 1899-1900-Continued.



TAble 14.-Statistics of iraining schools for nurses for the year 1899-1900-Continued.


Table 14.—Statistics of training schools for nurses for the year 1899-1900-Continued.


| 365 | Clinton, S. C...-..... | Fairchild Infirmary of Thornwell Orphanage. | 1893 | Mary M. | June 25 |  | 6 | 2 | 2 | 0 | 0 |  | 12 | 5,000 |  |  | 500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 366 | Memphis, Tent | City Hospital .--...--.....- | 1898 | Ada Robinsor. | June 30 | 0 | 12 | 8 | 2 | 10 | 10 |  | 125 | 100,000 | 24,000 | 0 | 840 |
| $36 \%$ | Nashville, Tenn | City Hospital | 1891 | Mary Monaban | (c) | 0 | 10 | ${ }^{8}$ | ? | 1.5 | 15 |  | 120 |  |  |  | 2,000 |
| 368 | Galveston, Tex | John Sealy Hospital | 1899 | Hamna Kindbom | May 15 |  | 18 | 8 | 2 | 10 | 10 |  | 100 |  |  |  |  |
| 369 | Salt Lake City, Utah | St. Mark's Hospital | 1894 | Nellie F. Crosslan | Sept. 1 |  | 26 | 10 | 3 | 6 | 8 | 12 | 86 | 80,000 | 5,000 | ¢, 000 |  |
| 370 | Proctor, Vt....-...... | Proctor Hospital | 1899 | Letitia Jackson | Oct. 1 |  | 8 | 4 | 2 | 8 | 12 |  | 8 | 4,000 |  |  | 1,500 |
| 371 | Alexandria, | Alexandria Infirmar | 1894 | Marjorie Adamson. |  |  | 4 | 2 | 3 | 6 | 8 | 8 | 60 | 40,000 |  |  |  |
| $37 \%$ | Fampton, V | Dixie Hospital . .-. . | 1890 | Frances Weidner, M.D. | June 1 | 1 | 21 | 6 | 2 | 4 | 4 | (b) | 21 | 6,000 |  |  |  |
| 373 | Norfolk, | Norfoik Protestant Fospital. | 1891 | Mattie T. Shackelford. | June 1 |  | 16 | 6 | 2 | 8 | 8 |  | 40 | 25,000 |  | 3,000 |  |
| 37 | ----do-------------- | St. Vincent's Hospital ..... | 1894 | M. Laura Eckemonde | June 15 | 0 | 23 | 6 | 3 | 5 | 5 | 5 | 275 |  |  |  |  |
|  | Petersbur | Home for the Sick | 1895 | L. Nevins Ions......- | June 30 | 0 | 5 | ${ }^{3}$ | $\stackrel{3}{2}$ | 7 | 9 |  | 24 | 10,000 | 5,000 |  | 000 |
|  | Ricbmond | Ola Dominion Hospi | 1893 | S. H. Cabaniss | June 5 | 0 | 29 | 16 | 3 | 0 | 0 | 0 | 85 |  |  | 1,108 | 828 |
|  | -....do | St. Luke's Hospital ......... | 1887 | Louise M. Powel | Aug. 1 | 0 | 18 | 6 | $\underset{3}{2}$ | $8 \frac{2}{2}$ | 81 |  | 48 | 50, 000 | 0 | 0 |  |
|  | ---.-10 | Virginia Hospital ------.-. | 1893 | Agnes Randolph | Oct. $\frac{1}{3}$ |  | 18 | ${ }_{7}$ | $\stackrel{3}{3}$ | 6 | 8 | 10 | 70 | 30.000 | 0 | 0 | 500 |
| 380 | Seattle, Was | Seattle General Hospital.- | 1893 | Mary P. King........ | Jan. 3 | 0 | 15 | 7 | \% | 5 | 8 |  | 37 | 60,000 |  |  |  |
| 380 | Spokane, Was | Matia Beard Deaconess Home and Hospital. | 1898 | $\qquad$ | May 31 |  | 8 | 0 | 2 | 5 | 8 |  | 18 | 10,000 |  |  | 00 |
| 38 | Tacoma, | Fannie C. Paddock Memorial Hospital. | 1895 |  |  |  | 13 | 2 | 2 | 5 | 10 |  | 80 | 50,000 |  | 12,000 |  |
|  | Wheoling, W. V | City Hospital* | 1891 | Harriet | (c) |  | 12 | 2 | 2 | 8 | 12 |  | 75 |  |  |  |  |
|  | Ashland | Dodd's Hospita | 1895 | E. A. Tre | Sept. 30 | 1 | 4 | 0 | 2 | $\left\{\begin{array}{l}10 \\ 15\end{array}\right.$ | 19 |  | 3 B | 0 | $\theta$ | 0 |  |
|  | Milwaukee, | St. Mary's Hospit | 1892 | Sister Lucia James .- | June 15 | 0 | 22 | 4 | 3 | 5 | 5 | 5 | 120 |  | 0 | 0 |  |
|  |  | Trinity Hospitial | 1889 | N. B. Casey --------. | June 15 |  | 45 | 18 | 3 |  |  |  | 100 | 160, 010 |  |  | 760 |
|  |  | Wisconsid Training School for Nurses. | 1889 | Maria Tweed | Oet. - |  | 20 | 13 | 2 | 0 | 0 | 0 |  |  |  |  |  |
|  | Oconomownce, W | Waldheim sanitorium -..- | 1894 | Mrs. V. Gireen | June 1 | 0 | 11 | 6 | 2 | 0 | 0 |  | 50 | 80.000 | 0 | 0 |  |
|  | Palmyra, Wis | Palmyra Springs Sanitariam. | 1898 | Katherine Kearney . | June 30 | 0 | 17 | 5 | 3 | 5 | 10 | 15 | 35 |  |  |  |  |
|  | Wausau, Wis | Riverside Hospital ${ }^{\text {² }}$ - | 1805 | Mrs. Simms |  |  | 8 | 9 | 2 |  |  | (e) | 30 |  |  |  |  |
| 390 | Wauwatosa, Wis | Nilwaukee County Hosvital | 1396 | Harriet Price | July 15 | 0 | 23 | 9 | 2 | 8 | 10 |  | 200 | 150,000 |  |  | 3,500 |
| 39 | Rock Springs, Wyo . | Wyoming General Hospital. | 1897 | W.C.Burke, M. D | June 30 |  | 6 | 2 | 3 | 8 | 10 | 12 | 42 | 20,000 | 0 |  |  |
|  |  | HOSPITALS FOR THE INSANE. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 39 | Tuscaloosa, | Alabama Bryce Hospital for Insane. | 1891 | Mary L. Puck and S. S. Crawford. | June 20 | 12 | 25 | 8 | 2 | 8,15 | 8,25 |  | 1,491 | 750, 000 |  |  |  |
| 39 | Washington, D.C | fGovermment Hospital for Insane. |  | Lelia Pizzini |  | 24 | 20 | $\theta$ | 2 | $\left\{\begin{array}{l}18 \\ 20\end{array}\right.$ | 20 |  |  | 1,250,000 | 0 | 0 |  |
| 394 | Hospital, Ill. | Eastern Illinois Hospital for Insane. | $188 \frac{1}{8}$ |  | ) | 75 | 100 | 14 | 2 |  |  |  | 2,250 |  |  |  |  |
| 93 | Logansport, Ind. | $\left\{\begin{array}{l} \text { Northern Indiana Hospi- } \\ \text { tal Ior Insane. } \end{array}\right.$ | 1895 | Sarah Dunkle | pr. 30 | 29 | 28 | 16 | 2 | $\left\{\begin{array}{l}18 \\ 25\end{array}\right.$ | 20 |  | 610 | 563,385 | 0 | 0 |  |
|  | * In 1898-99. | a Approximately. | 550 at | rautution. c | o defimite | ses | sion |  |  | $d \$ 65$ | at g | radua | ion. |  | 100 at gra | uation. |  |

TAbLE 14.—Statistics of training schools for nurses for the year 1899-1900-Continued.



## CHAPTER XXXVII.

## AGRICULTURAL AND MECHANICAL COLLEGES.

The reports for the year ending June 30, 1900, received from the presidents of the institutions endowed by the acts of Congress approved July 2, 1862, and August 30, 1890, for the estabilishment and for the more complete endowment and support of colleges for the benefit of agriculture and the mechanic arts show a decided increase in instruciors, students, property, income, etc., as well as the inauguration of new lines of work. The number of such institutions has increasd from 64 to 65 by the establishment in Oklahoma of the Colored Agricultural and Normal University at Langston, Okla, and its designation by the legisiature, to receive a portion of the funds authorized to te paid annually to the Terribory of Oklahoma by the act of Congress approved August 30, 1890. Women are admitted to all but 10 of the 65 institutions. Those not admitting women are: Delaware College, Georgia State College of Agriculture and Mechanic Arts, Louisiana State University, Maryland Agricultural College, Alcorn Agricultural and Mechanical College (Mississippi), Rutgers Scientific School (New Jersey), North Carolina College of Agriculture and Mechanic Arts, Clemson College (South Carclina), Agricultural and Mechanical College of Texas, and Virginia Agricultural and Mechanical College.

TEXTILE INDUSTRY.
Instruction in textile industry with special reference to the manufacture of cotton fabrics has been undertaken by three of the agricultural colleges of the South. ${ }^{1}$
The Clemson College of South Carolina established a textile course in 1888. The textio building is a two-story brick structure of modern cotton-mill design, protected from fire by antomatic sprinklers and a 10,000 -gallon water tank in the tower. The first floor is occupied by recitation rooms, carding and spinning rooms and office. On the second floor are the dyeing and weaving departments. Mach of the oquipment of the textile building was donated to the school by manufacturers of machinery in the North and South. In the freshman and sophomore years the textile course is the same as the mechanical course, but specialization in textile subjects begins in the junior year. The course in textile industry, leading to the degree of bachelor of science, is as follows:

FRESHMAN YEAR.

| Subjects. | Hours per week. |  | Subjects. | Hours per week. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | First term. | $\begin{aligned} & \text { Second } \\ & \text { term. } \end{aligned}$ |  | First term. | Second term. |
| Mathematics | 5 | 5 | Woodwork | 3 | 3 |
| English | 4 | 4 | Mechanical drawing | 3 | 3 |
| Composition and sp | 1 | 1 | Free-hand drawing- | 4 | 4 |
| History | 3 | 3 | Forge work | 3 | 3 |
| Agriculture | 2 | 2 | Militar ${ }^{\text {y }}$ drill | 2 | 2 |
| SOPHOMORE YEAR. |  |  |  |  |  |
| Mathematics | 5332223 | $\begin{array}{r} 5 \\ 3 \\ a 3 \\ 23 \\ 2 \\ 2 \\ 3 \end{array}$ | Mechanical drawing Foundry Chemical laboratory Descriptive geometry Militaz's drill | $\begin{aligned} & 3 \\ & 3 \\ & 4 \\ & 0 \\ & 2 \end{aligned}$ | 2 <br> 3 <br> 2 <br> 2 <br> 2 <br> 2 |
| English... |  |  |  |  |  |
| Chemistry |  |  |  |  |  |
| Natrual philosophy |  |  |  |  |  |
| History --.------ |  |  |  |  |  |
| Woodwork |  |  |  |  |  |

${ }^{1}$ The State of Georgia has a textile department at the State School of Technologr, Atlanta, Ga. $a$ Chemistry first half; surveying second half.

JUNIOR YEAR.


SENIOR YEAR.


The North Carolina College of Agriculture and Mechanic Arts established two courses of study in textile industry in 1890-a four years' course leading to the degree of bachelor of engineering, and a short or manual course of two years. As in the case of the Clemson College, specia'ization in the regular course begins in the junior year. The courses are as follows:

REGULAR COURSE.

| Subjects. | Hours per week. |  |  | Subjects. | Hours per week. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | First term. | Second term. | Third term. |  | First term. | Second term. | Third terin. |
| FRESHMAN YEAR. |  |  |  | JUNIOR YEAR. |  |  |  |
| Free-hand drawing- | 4 |  |  | Cotton milling | 5 | 5 | 5 |
| Mechanical drawing.... | 4 | 4 | 4 4 | Cotton machinery | 6 | 6 | 6 |
| Forge shop-.......-- | $\stackrel{2}{9}$ | $\stackrel{2}{0}$ | $\stackrel{2}{2}$ | Drawing and designing | 5 | 5 | 5 |
| Lathe shop --.-.-.-.-.-. | 2 | 2 | 2 | Analytical geometry-.- | 5 |  |  |
| Algebra . | 5 | 5 |  | Calculus |  | 5 | 5 |
| Geometry |  |  | 5 | Organic chemistry--- | 2 | 2 | 2 |
| Bookkeeping --.-.-----. | 1 | 1 | 1 | Qualitative analysis .-- | 4 | 4 | 4 |
| Elementary physics .-- | 2 | 2 | 2 | English literatule. |  | 3 | 3 |
| Physical geography |  |  | \% | English history | 3 |  |  |
| Physiology ............... | 2 |  |  | Militavy drill .- | 3 | 3 | 3 |
| Rhetoric and composition $\qquad$ | 3 | 3 | 3 | SENIOR YEAR. |  |  |  |
| History | 2 | \% | 2 |  |  |  |  |
| Civics ---- |  | $\stackrel{*}{3}$ |  | Mechanics of engineer- |  |  |  |
| Military drill | 3 | 3 | 3 | ing Mechanics of machin- | 3 |  |  |
| SOPHOMORE YEAR. |  |  |  | ery <br> Graphics of mechan- |  | 3 |  |
| Steam engine ............ | 1 | 1 | 1 | isin .................... |  |  | 3 |
| Mechanical drawing ...- | 2 | 2 | 2 | Machine design | 4 | 4 | 4 |
| Turning and pattern |  |  |  | Cotton millin ${ }_{\text {c }}$---....--- | 5 | 5 | 5 |
| shop | 5 | 5 | 5 | Cotton machinery |  |  |  |
| Architecture--....-..... | 1 | 1 | 1 | (practice) .-........... | 8 | 8 | 8 |
| Architectural drawing. <br> Geometry | $\stackrel{4}{4}$ | 4 | 4 | Textile chemistry and dyeing | 3 | 3 | 3 |
| Trigonometry ----------- -- |  | 5 |  | Textile chemistry and | 3 | 3 | 3 |
| Analytical geometry |  |  | 5 | dyeing (labotatory).- | 3 | 3 | 3 |
| Mechanics .. | 2 | 2 | 2 | Enclish ... | 2 | $\underset{\sim}{2}$ | 2 |
| Inorganic chemistry .... | 3 | 3 | 3 | Political economy .....- | 2 | $\stackrel{2}{1}$ | 2 |
| Inorganic chemistry <br> (laboratory) | 4 |  | 4 | Military science .-......- | $\frac{1}{3}$ | 1 | $\frac{1}{3}$ |
| Higher rhetoric.-...-.......- | 3 | 3 |  | Ninzary dinn-..-------- |  |  |  |
| American literature |  |  | 3 |  |  |  |  |
| Military drill . | 3 | 8 | 3 |  |  |  |  |

SHORT OR MANUAL COURSE.

| Subjects. | Hours per week. |  |  | Subjects. | Hours per week. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | First term. | Second term. | Third term. |  | First term. | Second term. | Third term. |
| PRRST YEAR. |  |  |  | SECOND YEAR. |  |  |  |
| Drawing | 5 | 5 | 5 | Mechanical technology - | 3 | 3 | 3 |
| Shop......--- | 10 | 10 | 10 | Drawing .-......--. --...- | 8 | 5 | 5 |
| Cotton milling -.......- | 5 | 5 | 5 | Shop .... | $\stackrel{2}{5}$ | $\stackrel{2}{5}$ | 5 |
| Cotton machinery <br> (practice) | 6 | 6 | 6 | Cotton miling----...- | 5 | 5 | 5 |
| Arithmetic.-. | 5 |  |  | (practice)...-...-- -- | 8 | 8 | 8 |
| Algebra ..... .- |  |  | 5 | Algebra. .--------------- | 5 | 5 |  |
| English composition.... | 3 | -3 | 3 | Geometry .-.-........... |  |  | 5 |
| Military drill .-........... | 3 | 3 | 3 | Physics ${ }_{\text {Military }}$ drill | 3 | 2 | 3 |

The Mississippi Agricultural and Mechanical College announces the establishment of a textile department for the year 1900-1901, but has not yet published an outline of the course of study provided. The building for the textile school is to cost $\$ 20,000$.
The nature of the work included in the general term "textile industry" is shown in the following statement taken from the catalogue of Clemson College for the year 1899-1900:

Chemistry and dyeing.-Physical and chemical nature of the cotton fiber, bleaching agents, mordants and dyestulis, coal-tar colors, aniline dyes, preparation and application of mordants and dyestufis to cotton: experimental dyeing of loose cottons, yarns, and cloth; practical work in the dyehouse.
Carding and spinning. - The cottons of the world; their suitability for different yarns; botany of cotton; structure and composition of the fiber; selection of cotton for different classes of work; classification of cotton: conditions, favorable and unfavorable, to the manipulation of the fiber; strength of fibar; detection of faults in raw cotton; picking and handling of cotton; advantages and disadvantages of the saw gin, construction, speeds, etc.; roller gin, uses, speed, production, etc.; baling of cotton, square and cylindrical wales; compressing and its effects on the fiber; testing for cotton and other fibers.
Mixing.-Reasons for mixing cottons; hand and machine mixing; the advantages and disadvantages of each system; blending, methods of blending, combining of cottons of different characteristics to produce special effects in the yarns.

Picker room. -The arrangement and construction of picker rooms; dust trunks, their forms, construction and use: antomatic feeders, their construction, action of the feeder on the cotton, speeds and adjustments of the various parts; the breaker lapper, use, construction, different kinds of beaters, speeds and settings of the different parts of the machine; intermediate and finisher lappers, feed rolls, evener motions; difierent kinds of beaters, speeds, settings, etc., advantages of each; shape and setting of screens; regulation of air currents; formation of a good lap; care and operation of lapper; all calculations on the above machines, drafts, length of laps, ete.
Carding.- The principle and purpose of carding: diferent types of cards; construction of the feed plate, the licker-in, cylinder, doffer, coiler head, flats, screens, etc.; the different settings of the cards to produce the best results on different lengths and qualities of fibers; the regulation of waste made in the card; card clothing, and difierent methods of grinding the same; setting of the varions parts of the card; calculations.

Railucay hecds and drazv frames.-Object, use, construction, advantages, and disadvantages of railway heads; comparing metallic and leather rolls; explanation of stop motions and evener; calculations. Principle of drawing slivers; object and purpose of draw frames; thod of setting the rolls; size and speed of rolls; distribution of draft between the rolls; stop motions and calculations.
Fly frames.-Slubber, intermediate, roving, and jack frames; construction of the modern fly frames; the bobbin and fiyer lead, method of driving the bobbin in each; the differential motion and its purpose; traverse, builder, and stop motions; the formation of a bobbin; drawing rolls and their adjustment; calculations for drafts, twist, lay, tension, and other gears.

Spinning both on frames and mules.-Construction and use of the ring spinning frame: its principal parts, such as rings, spindles, travelers, builder motion, etc.; the effect of twist on the strength, color, and elasticity of the yarn; calculations; the spinning mule and its uses; special features; description of the head stock, cam shaft, and other parts; the copping rail and formation of a cop; different movements in the mule and timing of the same; calculations.

Miscellaneous.-Reelings; bandling; twisting; doubling; spooling; warping, etc.; calculations and information regarding each process.
Slashing.-The slasher, construction and use; necessity for slashing; creel, cylinders, size box, etc.; mixing of size: different sizing ingredients for special purposes; methods of preparing warps for the slasher.

Designing.-Principies generally used in the formation of weaves; design paper and the method of representing weaves on same; explanation of warp and filling; the plain or cotton weave; twill weaves, satin weaves, and methods of construction; foundation weave derived from plain weaves; rib weaves, basket weaves; weaves derived from twills and broken twills; steep or diagonal, skip, reclining and curve twills; combination steep twills, corkscrev twills, entwining twills, twil's producing checker-board effects, pointed twills; the method of making drawing-in dratts, chain drafts; methods used in reducing weaves to the lowest number of harness, plain and fancy drafts-point, skip, mixed, or crossed draws; rules for finding number of heddles required for each harness; fancy effects produced with the plain weaves using colored warp and filling; effects produced by using two or more colors on ribs and basket weaves; weaves derived from satins, shading of satin weaves, figured effects produced by using warp and filling satins: honeycomb weaves; imitation gauze weaves; fabrics constructed by combining weaves with one system of warp and two systems of filling; Gguring with two warps and one filing; double cloth, construction of double-cloth weaves, methods of indicating them on desion paper, stitching of double-cloth weaves to give figured effects, the double plain weave to give reversible figured effects; weaves for special fabrics-Pedford cords, pique, matellasses.

Jacquard designing.-Explanation of the Jacquard machine; Jacquard harness, tying up of the harness-the straight through, center, French and English systems of tying up; the single and double lift Jacruard, the single and double cylinder machine; the open and closed shed machine explained; method of laying out patterns for Jacquard designs, size of sketch required; enlarging and reducing figures from sketches; comber board and method of figuring texture for same; casting out of hooks to reduce texture of goods; card cutting, lacing and wiring.

Cloth analysis.-Methods used for arranging cloth for analysis; figuring the size of cotton, woolen, worsted, and silk yarns; calculations for converting one system of yarns into that of another; finding the weights, counts, etc., from the analysis; reed calculations.

This work takes up all classes of weaves that can be woven on harness, and gives the student a thorough knowledge of figuring yarns, weights, ends, picks per inch, etc. The results obtained in this manner are very instructive, as they show the good and the bad qualities of the various weaves and color effects.

Power-loom wecwing. - Construction of the plain loom; various shedding motions; open-shed machine: side-cam loom, setting the cams: pick motion, methods of picking; take-up and let-off motions; box motion, drop box, skip box; timing and setting box motion; the dobby and its uses, pattern chains for single and double index dobbies, setting and timing of the dobby; leno motion and setting of the same; doup harness and setting of same; Jacquard loom analyzed and explained.

The equipment of the textile department of Clemson College consists of ${ }^{\circ}$ the following:

Pickers.-1 Atherton antomatic feeder; 1 Atherton combination breaker and finisher lapper with evener motion.

Cards.-1 Saco \& Pettee 40 -inch revolving flat card; 1 Mason 40 -inch revolving flat card; 1 Entwistle traverse wheel grinder; 2 Entwistle drum grinders; stripping and burnishing rolls; complete set carder's tools.

Combing.-1 sliver lap machine; 1 ribbon lappar; 1 combing machine.
Railway heads.-1 Saco \& Pettee railway head with evening motion, stop motion, and metallic rolls: 1 Mason railway head with evening motion, stop motion, and metallic rolls.

Drawing. -1 Saco \& Pettee drawing frara, 4 deliveries, stop motion, and metallic rolls; 1 Mason drawing frame, 4 deliveries, stop motion, and metallic rolls.

Fly frames.-1 Saco \& Pettee 40 -spindle slubber with latest improved differential motion; 1 Saco \& Pettee 60 -spindle intermediate roving frame with latest improved differential motion; 1 Saco \& Pettee 80 -spindle fine roving frame with latest improved differential motion.

Ring spinning.-1 Saco \& Pettee combination warp and filling ring spinning frame, $1 \geqslant 8$ spindles; 1 Mason combination warp and filling ring spinning frame, 112 spindles.

Mute spinning.- 1 Mason spinning mule, 120 spindles, 1 -inch gauge, with all latest improvements.

Spooling.- 1 Draper spooler, 40 spindles; 1 Saco $\&$ Pettee spooler, 72 spindles.
Twisting. - 1 Draper combination wet and dry twister, 48 spindles.
Winding.-1 Schaum \& Uhrlinger bobbin winder; 1 Atwood-Morrison Company winder.
Reeling. - 1 D. A. Tompkins Company 50 -spindle adjustable reel.
Warping. - 1 Draper beaming machine.
Hand looms.-Hand-loom weave room fully equipped with 4 by 4 box looms, fitted with 30 harness-shedding engines for fancy cottons; also drawing-in frames, warping frames, beaming frames, etc.

Power looms.-One 28 -inch Northrop loom with warp stop motion and automatic filling magazine; one 40 -inch Northrop loom with cams for weaving up to 5 -harness fabrics; 1 Mason 4 by 1 drop-box loom with Stafford 20-harness dobby; 1 Mason 40 -inch loom with Stafford 20 harness dobby: 1 Mason 24 -harness dobby loom; 1 Stafford 20 -harness loom with leno attachment; 1 Stafford dress-goods loom with Stafford 400-hook, single lift, swing cylinder, Jacquard.

Jacquard card cutting.-1 John Royle French index foot-power card cutter; 3 card-lacing frames.

## STATISTICS.

The number of instructors in the agricuitural and mechanical departments of these institutions has increased from 1,958 in 1899 to 2,221 in 1900. This increase is at the rate of 13.4 per cent. The increase in men is 12.7 per cent and in women 18.2 per cent.

The students in the undergraduate courses of the agricultural and mechanical departments have increased from 15,084 to 18,066 , or at the rate of 19.8 per cent. The men have increased at a greater rate than the women-men 20.9 per cent and women 14.3 per cent. A considerable increase is shown in the number of students pursuing courses of study in agriculture and in the various branches of engineering.

The income shows an increase of $\$ 918, \% 33$. This is due to greatly increased State appropriations and the increase in endowment funds.

## Summary of statistics.

|  | Men. | Women. |
| :---: | :---: | :---: |
| Professors and instructors: |  |  |
| In departments of agriculture and mechanic arts In all departments | $\begin{aligned} & 1,922 \\ & 2,799 \end{aligned}$ | 899 |
| Students: |  |  |
| In departments of agriculture and mechanic arts- |  |  |
| Creparatory | 4.707 | 2,206 |
| Graduate | , 556 | , 119 |
| In other departments | 9,002 | $4,8 \% 6$ |
| Total | 29,389 | 10,114 |

Distribution of studeuts in courses of study.
Agxiculture ..... 5,035
Engineering:
Mechanicai ..... 3,938
Civil ..... 1,364
Electrical ..... 1,617
Mining ..... 822
Architecture ..... 8,341
Household economy ..... 1,868
Veterinary science ..... 1,167
Dairying ..... 1,215
Military tactics ..... 12,800

## PROPERTT

Libiaries:
Number of volumes ..... 1,153,380
Number of pamphlets ..... 336, 938
Endowment funds ..... \$26, 748, 465
Land:
23,471
Total number of acres
11,000
11,000 ..... 3, 822
Acres used for experiments
Acres used for experiments Value ..... §2, 508,559Value of buildings:Total17,618,823
Used for instruction in subjects specified in act of August 30, 1890 ..... $\$ 13,039,343$
Value of equipment:
\$7, 604, 635
Total ..... $\$ 6,453,821$
INCOMEFederal aid:Flom act of̈ August 30, 18901,200,000
Total $1,844,177$
State aid ..... 2,916,837
Fees and other receipts ..... 2,350,735
Total income ..... 7,111,749EXPENDITURES.
For instruction in subjects specified in act of August 30, 1890 ..... \$2, 763, 707
For instruction in other subjects and administrative expenses ..... 2,555,596

The following table gives the amounts that have been received each year from the General Government by the several States and Territories in accordance with the provisions of the act of Congress approved August 30, 1890, for the more complete endowment and support of colleges of agriculture and the mechanic arts:

D
Dishursements to the States and Territories of the appropriation in aid of colleges of agriculture and the mechanic arts, etc.-Continued.

| State or Territory. | Year ending June 30- |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1890. | 1891. | 1892. | 1833. | 1894. | 1895. | 1896. | 1897. | 1898. | $189 \%$. | 1900. | 1901. |
| Vermont. | \$15,000 | \$18,000 | \$17,000 | \$18,000 | \$19,000 | S30,000 | \$21,000 | צ-2, 2, 000 | \$23, 000 | \$24, 000 | \$25, 000 | \$25, 000 |
| Virginia | 15,000 | 16,000 | 17,000 | 18,000 | 19,000 | 20, 009 | 21,000 | 222,000 | 23,000 | 21,000 | 25, 000 | 2\%,000 |
| Washington. |  |  | 17,000 | 18,000 | 19, 000 | 20,000 | \%1,000 | 22, 090 | 23, 000 | 24,000 | 2\%, 000 | 2\%,000 |
| West Virgini | 15,000 | 16,000 | 17,000 | 18,900 | 19, 600 | 20, 0200 | 21,000 | 22,000 | 23,000 | 2i, 000 | 25, 000 | 25, 000 |
| Wisconsin | 15, 000 | 16,000 | 17,0060 | 18,000 | 19, 000 | 20000 | 21,000 | 22, 0000 | : 23,00 | 24, 000 | 25,000 | 2\%, oro |
| Wyoming | 15,000 | 16,000 | 17,000 | 18,000 | 19, 606) | 20,000 | 21,000 | 22, 000 | 23,000 | 24, 000 | 25,000 | 25, 0 , 0 |
| Total. | 650, 0100 | \% 04,000 | 782,000 | 864,000 | 913, 000 | 960, 000 | 1,003,000 | 1,056,000 | 1,104,000 | 1,152,000 | 1,200,000 | 1,200,000 |

NEW BUILDINGS.
The reports of $2 \%$ institutions show that during the year there were erected or in course of construction new buildings costing $\$ 1,150,224$. A description of the buildings, together with their purpose and cost, so far as reported, are given in the following pages:
Alabama Polytechnic Institute. -The forge and forndry building of the mechanic arts department has been enlarged and the equipment increased. A separate building for the experiment station chemical laboratory has been built and the laboratory for instraction enlarged. A second greenhouse for the horticultural department has also been built. These improvements cost $\$ 2,402.83$.

University of Arizona.-A substantial brick dormitory has been built for the use of male students and teachers at a cost of $\$ 12,000$. It contains 40 rooms and has many modern conveniences.

University of Arkansas.-A valuable addition has been made to the chemical and physical laboratory. It is 60 by 30 feet, two stories high, with basement built of bricks with stone foundation. A neat cottage residence for the farm manager has leen erected. Many important repairs and improvements have been made on the farm lands and buildings and on the station grounds.

University of California.-Adadions to buildings have been made as follows: Chemicai laboratory, cost $\$ \stackrel{5}{2}, 167$; students' observatory, cost $\$ 1.575$; gymnasium, cost $\$ 13,387$.

Floridd Agricultural College.-Foster Hall has be n erected as a residence for the director of the experiment station and as a home for a limited number of women students. The building will furnish accommodations for 30 young women. The cost of the building, grounds, fencing, and furniture will aggregate about $\$ 9,000$.

University of Idaho.-The State has completed and furnished the main builaing, which has been incomplete for a number of years. This was done at a cost of $\$ 14,000$. A farm house costing $\$ 1,000$ has been erected, and plans are now drawn for a new barn, to cost about $\$ 1,300$.

University of Illinois.-An agricultural building, costing $\$ 150,000$, will be ready for occupancy September 1, 1900. It consists of four separate structures built around an open court and connected by corridors. The main building is 248 feet long, from 50 to 100 feet in depth, and three stories high, and contains offices, class rooms, and laboratories for the departments of agronomy, animal husbandry, dairy husbandry, horticulture, and veterinary science; offices of the State ontomologist; the chemical laboratory of the experiment station; commodious administration rooms; an assombly room with a seating capacity of 500 ; and on each fioor a fireproof vault for records. The other three buildings are each 45 by 116 feet and two stories high; one is for dairy manufactures, one for farm machinery, and one for veterinary science and stock judging. An adjacent glass structure serves the departments of agronomy and horticulture. The building is of stone and brick, roofed with slate, and contains 113 rooms and a total floor space of nearly $d$ acres.
Purdue University (Indiana).-A portion of the men's dormitory has been remodeled for recitation rooms. Wleven additional rooms are thus made available for class work. Over 11,000 square feet of cement walks have been laid on the campus, completing the work so far as present needs go. The equipment in all departments has been added to, to the value of not less than $\$ 10,000$.
Iowa State College of Agriculture and Mechanic Arts.-A horse barn, composed of brick walls, slate roof, and modern equipment, has been contracted for $\$ 13,500$. A house for the residence of the president of the college is building, and when completed will cost about $\$ 12,000$. The contract has been let for an engineering
hall, to house the civil, mechanical, electrical, and mining engineering departments. The building is four stories and fireproof. The contract price is $\$ 154,800$.
Kansas State Agricultural College.-The agricultural hall, 90 by 95 feet, two stories and basement, contains offices, class rooms, and laboratories for the department of agriculture. It is well equipped with modern improved machinery for butter and cheese making, milk testing, etc. All the workrooms are lined with opalite tiling. The building cost $\$ 25,000$; equipment and apparatus $\$ 19,286$. The dairy barn is 40 by 175 feet, and will be fitted up with modern swinging stalls for 80 head of cows, arranged in two rows, with driveway between. Cost of building $\$ 3,000$. Additions have been made to Mechanics Hall at a cost of $\$ 9,000$, and to the heating plant at a cost of $\$ 5,000$.

Louisiana State University.-Garig Hall, costing about $\$ 10,000$, is a handsome brick building facing the parade ground on the east. It is a gift to the university from Mr. William Garig, of Baton Ronge, and is used as an assembly hall, having a seating capacity of about 1,200 . A two story wooden laboratory for the experiment station, costing $\$ 2,500$, and a two-story wooden addition to the mechanical workshop, costing $\$ 3,200$, were also erected during the year.

University of Maine.-A drill hall is in process of erection at a cost of about $\$ 25,000$.

Michigan Agricultural College.--Three buildings are now in course of construction, and will be ready for occupancy during the next school year.

The women's building will cost when completed, with the furnishings, $\$ 95,000$. It is well constructed of. Findly pressed brick and red sandstone. and has hard wood fioors, red-oak trimmings, and adamant plaster throughout. The heating, plumbing, and lighting are of modern design and of first-class quality of material. In this building are the offices and private rooms of the dean and of the various women instructors; a suite of four rooms for the department of domestic art; a kitchen laboratory, with adjacent dining room for classes in cooking; a large recitation room; pleasant parlors; a large dining room, kitchen, and serving room on third fioor; a two-story gymnasium: music rooms; waiting and reception rooms; toilet and bath rooms; living rooms for 120 young women.
The dairy building is a brick structure of 64 by $\% 0$ feet, two stories high, with basement. In the basement are the storerooms, cold storage, cheese-curing rooms, lockers, and wash rooms for students. On the first fioor, are the home dairy room, butter room, cheese room, wash room, and testing room. The second floor is given up to class rooms, offices, and laboratories. The cost of the building is $\$ 15,000$.
The barn is a two-story building, 41 by 72 feet, with a wing 40 by 76 feet.
University of Minnesota.-A building for instruction in horticulture and forestry, costing $\$ 30,000$, was erected. It consists of a three-story brick building, 80 by 50 feet, with adjoining greenhouses 66 by 125 feet in area.
Mississippi Agricultural and Mechanical College.-Since the last report there has been erected a new creamery building at a cost of more than $\$ 2,000$, and equipped at an additional cost of more than $\$ 2,000$. There is in course of construction now a new textile school building to cost $\$ 20,000$; also a new dormitory and chapel to cost about $\$ 30,000$.
Alcorn Agricultural and Mechanical College.-About $\$ 4,000$ has been expended in erecting a professor's residence and making general repairs.

Missouri School of Mines and Metallurgy.-Erected one temporary building for lecture and drawing purposes; also extended the building used for shops by a 50 foot addition. Both buildings are temporary in nature and were necessitated by the crowded condition of the school.
Montana College of Agriculture and Mechanic Arts.-A new building has been erected for a gymnasium at a cost of $\$ 1,100$. Additional ground has been pur-
chased amounting to 35 acres, at a cost of $\$ 4,000$, as an addition to the college campus.

University of Nebraska.-University Soldiers' Memorial Hall, an addition to Grant Memorial Hall (armory and gymnasium), is now in course of construction. It is designed for use in giving enlarged accommodations for the military department, and also as a women's gymnasium, but for a time will provide a temporary auditorium and chapel, with a seating capacity of 1,500 .

New Mcxico College of Agriculture and Hfechanic Arts.-A large adobe corral, for the accommodation of the horses, cattle, feed, agricultural implements, etc., with a well and windmill, is partly completed, and will cost, when finished, about $\$ 2,000$.

North Dakota Agricultural College.-A new building, 40 feet square, has been added to the drill hall, giving the building now the shape of the letter Ts The new portion corresponds in general appearance to the main building, and has been fitted up with lockers, dressing rooms, and shower baths for the beneft of the athletic association; also a room for the custodian of the gymnasium. The new brilding is steam heated and has water connections.

Oklahoma Agricultural and Mechanical College. -Two two-story brick buildings, with basements, have been erected; a library building, costing $\$ 20,000$; and a chemistry building, costing $\$ 8,000$. The library building will contain, besides the library, the departments off languages, history, and biology.

Oregon State Agricuttural College. - The mechanical hall has been completed at an additional cost of $\$ 8,416$. A steam heating plant has been put in at a cost of $\$ 18,8 \% \%$.

Colored Normal, Industrial, Agricultural and ITechanical College (South Caro-lina).-A barn and stables have been erected, at a cost of $\$ 1,500$. There is now in course of construction a manual-training building 125 by 90 feet, three stories high. The first floor of the north wing will contain the woodworking by machinery, and the south wing the blacksmith, wheelwright, and machine shops. The second floor of the north wing will contain the texthle school, and the third fioor the sadding, shoemaking, and tailoring shops. The second floor of the south wing will contain the plumbing and tinning shops, and the third floor the painting and glazing shops. The cost of the building will amount to about $\$ 10,000$.
South Dakota Agricultural College.-Two new buildings have been completed and occupied during the year. The gymnasium is a brick structure 66 by 70 feet and two stories high. The ground floor is devoted to a girls' gymnasium, offices, bath rooms, etc. The second floor consists of one room without posts and is used as a drill hall and gymnasium for the cadets. The cost of the building was $\$ 12,500$. The dairy building, costing $\$ 7,500$, is also two stories and of brick, 32 by 52 feet. The ground foor is occupied by the dairy proper, and has the usual machinery, such as separators, vats, churns, etc. Off from the main room are the laboratory, cheese-making room, and storage room. The second floor contains class rooms, offices, and the agricultural dairy museum.

Agricultural and Mechanical College of Texas.-There have been completed during the year Foster Hall, costing $\$ 28,000$, three professors' residences and a bachelors' hall, costing $\$ 6,500$, and an artesian well, costing $\$ 2,500$. Nearing com. pletion are an agricultural and horticultural building, costing $\$ 31,000$, and a sewer system, costing $\$ 8,000$. Foster Hall is a brick dormitory, and consists of three separate parts; the central one is four stories high and contains 19 rooms; the two ends are three stories high and contain 18 rooms each. The building has a capacity for 165 students. The Agricultural and Horticultural Building is planned to accommodate the agricultural and horticuitural features of the college and oxperiment station by furnishing specialiy designed rooms for class instruction, laboratory investigations, museum purposes, butter and cheese making,
pasteurizing railk, canning fruits and vegetables, seed storeroom, photographic room, and the necessary ofices for the accommodation of these departments. The building is 160 by $\% 7$ feet, covered with slate, two stories high, and built of brick. It will contain 27 rooms fitted with the best apparatus and machinery now in use for the instraction of students in the several branches of agriculture. The livestock room will permit the introdaction of animal subjects for the purposes of class instruction.

Prativie View State Normal and Industrial College, Prairie View, Tex.-A new three-story brick dormitory ${ }^{\text {Lor }}$ boys, 29 rooms, cost $\$ 10,000$.

Virginia Agricultural and ITechanical College.-New barn, costing \$8,000, largely for experimental purposes; Y. M. C. A. Hall, cost $\$ 20,000$.

Washington Agricultural College.-Science Hall, costing $\$ 53,000$ and devoted to the departments of botany, zoology, agricultare, horticulture, bacteriology, geology, and museum, has been completed. It is $1 \% 0$ by 80 feet, three stories, pressed brick and sandstone. Ferry Hall, the boys' dormitory, costing $\$ 10,000$, is four stories, 140 by 90 feet, and is arranged for 180 students, with dining hall, kitchen, etc. The Mechanical Building has been enlarged by an addition 65 by 95 feet. A hospital has been fitted up for the veterinary department and 110 animals received for treatment during the year.

West Virginia Colored Institute.-There has been erected a new boys' dormitory, brick and stone, at a cost of $\$ 16,000$, and a brick addition to the Academic Building, at a cost of $\$ 7,000$. The third story of the girls' dormitory has been finished at a cost of $\$ 500$.

University of Wisconsin.-The horse barn of̂ the Agricultural College has been thoroughly rebuilt at an expenditure of about $\$ 10,000$. A central heating plant, costing $\$ 17,000$, has been installed in a separate building, heat being conducted by steam pipes through tumels to buildings near enough to make this practicable. A chease-curing room, costing about 87,000 , is in process of erection for experimental work on the curing of cheese. In this new cheese-curing building facilities will ba provided for the manufacture of so-called foreign cheese. A building for the College of Engineering, to cost $\$ 100,000$, is in process of erection, to be completed about October 1, 1900.

University of Wyoming.-A new science hall, to cost $\$ 35,000$, is in course of construction. About 20 acres of land have been added to the campus and 80 acres to the experiment-station farm.

## CHANGES IN COURSES OR METIODS OF INSTRUCTION.

The work of the agricultural and mechanical colleges is constantly broadened by the strengthening of existing courses of study and by the establishment of new courses. The past few years have witnessed the organization of special courses of study in a large number of the institutions, prominent among which are the short winter courses in agriculture for farmers and the special courses in dairying. These courses are of special benefit to and intended for persons who can not spare the time to complete a regular college course. The new courses established during the year by the various institutions, as well as the changes in courses or methods of instruction, are as follows:

University of Arizona.-Courses in domestic science were added to the curriculum, and classes were maintained through the year in cooking, plain sewing, and dressmaking. The young women showed much enthusiasm in the prosecution of this work.

University of Arkansas.-A department of elocution and physical culture has beon organized. This has been attended mainly and quite largely by women. Besides various experiments in farm crops, increased attention has been devoted to horticulture and pomology.

Colorado Agricultural College. - The preparatory jear has been dropped.
Connecticut Agricultural College. - The only change made in the course of study was from the regular course for the senior class to three elective courses, beginning with the winter term: (a) General course; (b) course in agriculture; (c) course in horticulbure. In these courses students were permitted to specialize to a certain extent.

Floridd Agricultural College.-Provision has been made for the study of Greek and the adoption of a full classical course.

Purdue University (Indiana).-The winter course in agriculture put into active operation for the first.time industrial courses especially designed for women, as follows: Floriculture, household economy, household sanitation, domestic economy, botany, drawing, strudies in literature. About 20 women attended one or another of these courses.

Iowa State College of Agwiculture and Mechanic Aris.-A two-year 'course in mining engineering, a review course in mining engineering, a two-year course in ceramics, and a course in technology have been added. The review course in mining engineering is designed to assist young men to meet the requirements of the law passed by the last legislature requiring examinations of mine foremen, pit bosses, and hoisting engineers.

Kansas State Agricultural College.-The requirements for admission were raised by the addition of physiology, composition, one-term algebra, and bookkeeping. The work of the first year was made the same in all courses except such difference aะ sex requires. An electrical engineering course was added.

Louisiana State University. - A commercial course of four years leading to the degree of B. S. has Deen established.

Southern Universily (Louisiana).-The printing department has been made more elaborate and it has done much better work. The boys of the printing class, who learned all they know in that line at the institution, have all secured work for the summer vacation, on good pay, as printers, in New Orleans.

Unirersity of IItaine.-The classical course was inatgurated in the fall of 1899.
Massachusetts Agricultural College. The only changes in the course have been making French, German, and geology required studies in freshman, sophomore, and junior years, respectively, and electives in senior year. The course in chemistry has been greatiy extended.

Massachusetts Institute of Technology.-Two new courses have been established, one in landscape architecture and the other in heating and ventilation. In the former, besides the time spent in the general courses given in the course in architecture, time is given to horticuiture, surveying, topographical drawing, biology, and botany, natural Iandscape, curves and earthworks, geology, landscape design, landscape gardening, sanitary engineering and drainage, and masonry. In the latter, besides the subjects followed in the course in mechanical engineering, the subjects of hygiene of ventilation, dynamo electric machinery, and heating and ventilation in a less elementery way are treated.

University of Minnesota.-Texts or class bulletins have been prepored by members of the faculty of the School of Agriculture and of the College of Agriculture on the following subjects: Soils and Fertilizers; Sheep in Minnesota; Forage Crops; Feeding Dairy Cattle, and Sewing. The need of tezts and class helps is fully appreciated, and several other text-books on the industrial and scientific lines taught in the agricultural high school are nearing completion. Text-books are becoming an imperative necessity, since the School of Agriculture last year registered $40 \%$ students, the College of Agriculture 23 students, and the Dairy School 73 students. Women having been admitted to the Agricultural High School three years ago, the four-year colloge course was last year modified by the addition of subjects in household economics and other more general subjects, and
women graduates of the Agricultural High School are now admitted to the college course.

The work in mechanical engineering shows a healthy development. The courses in railroad engineering have been materially strengthened, and especial attention has been given to the practice of locomotive testing, with very satisfactory results. Cooperation with the railway companies in the vicinity has been found mutually advantageous.

Mississippi Agricultural and Mechanical College.-A course in dairy husbandry and a textile course are to be added.

Montana College of Agriculture and Mfechanic Arts.-A course in civil engineering has been added.

University of Nebraska.-In the Industrial College no changes have been made in the curriculum, as the group system, consisting of the general scientific and goneral agricultaral with 8 special and 4 technical groups, still prevails. The last of the 8 technical groups, namely, that of chemistry and domestic science, was added this year. In the engineering groups the studies of the first three years have been more closely correlated. Owing to the advanced stage to which sugar culture in Nebraska has grown the past few years, the sugar school has been discontinued.

New Hampshire College of Agriculture and Mechanic Arts.-The standard is being raised as rapidly as possible, and an increasing number of the freshmen are graduates of good preparatory schools.

New ITexico College of Agriculture and Mechanic Arts.—The course of study has been revised so as to make a strong and well-balanced course in agriculture, leginning with the academic year 1800-1901, instead of the merely nominal course heretofore offered. Heretofore there had been no live stock on the college farm except the work horses, and all that rolated to animal husbandry had to be omitted from the course in agriculture, bat even such theoretical instruction in scientific agriculture as might have been given was not offerel, and the strength of the institution went into the scientific and mechanical engineering courses. Henceforth a gool course in agriculture will be offered; the addition of a professor of civil engineering to the instructional force will make the civil engineering course a reality instead of a name; the mechanical engineering course will be stronger in the higher and post-graduate grades by reason of added equipment and an enlarged staff; and the general or scientific course has been so revised as to offer at the same time a more thorough and uniform educational foundation for all who take it and a wider range of election within the preseribed limits.

Cornell Universiiy, Ithaca, N. Y.-The legislature appropriated $\$ 10,000$ to the college of agricuiture for promoting agricultural knowledge throughout the State from May 1 to October 1, 1900, and $\$ 35,000$ for continuing the work from October 1,1900 , to October 1, 1901. The work carried on by reason of these appropriations is divided into two bureaus-investigations and experiments, and university extension and nature-study work. Investigations are carried on through the cooperation of many farmers, who give their time and attention to the experiments mapped out by the field agents. These investigations are divided into two general groups-one, the testing of soils through application of fertilizers of various kinds under different conditions and to different crops. In addition, many soils are analyzed. The tillage experiments have also been conducted by cooperation with the farmers. Three leading farm crops have been selected, all requiring introculture. The object of these investigations is to discover what effect superior tillage has on productivity. Judging from results, nothing which the college has done gives promise of improving tillage more than this class of investigation.

The extension of agricultural knowledge is also carried on by means of printed literature and lectures, and is arranged under six principal heads:

1. Farmers' reading course, on the correspondence plan.
2. Publication of teachers" leafets on nature study, treating in a popular form many of the common things of country life.
3. Junior naturalist clubs, which consist of a cooperation with the teacher in interesting pupils to observe and study salient principles of life of some of the common things.
4. Home nature-study course, designed for teachers, on the correspondence plan.
5. Lectures at teachers' institutes on topics pertaining to rural life.
6. Summer schools.

The farmers' reading course shows a most gratifying development. Ten thousand copies of each reading lesson sufficed to supply the demand last year; now 20,000 copies of each edition do not meet all the wants. During the last year 175,000 pages of instructional printed matter and 20,000 circulars and circular letters were sent to the farmers' reading-course students.

During the year the teachers leafets on nature study have been changed, and they are now issued at regular intervals in the form of a quarterly. Four editions have been published, containing 250,000 pages.

The junior naturalist clubs have grown during the year from 2,000 members to 35,000.

The home nature-study course is a correspondence course, designed exclusively for teachers, and numbers some 2,500 members.

Many lectures at teachers' institutes have been given during the year, and about fifty lectures have been delivered before various farmers' organizations. It is estimated that more than 30,000 persons received instruction by means of these lectures.

North Carolina College of Agriculture and Mechanic Arts.-The course of instruction has been enlarged by the addition of a textile department for instruction in cotton manufacturing. All the courses of instruction have been somewhat enlarged by additional requirements of shop work, drawing and designing, laboratory and field work. Enlarged instruction has been provided in industrial chemistry and electrical engineering. The college will not receive, hereafter, students desiring merely general education without technical instruction.

Oklahoma Agricultural and Mechanical College.-The courses of stady were materially revised and enlarged over previous years. Courses were offered as follows: General science and literature course; agricultural course; mechanical engineering course; courses in special sciences: 1, chemistry; 2, biology; 3, botany. All of these courses extend through four years and lead to the degree of bachelor of science. A ten weeks' course in agriculture and the mechanic arts was given, beginning January 1, 1900. Instruction was given in stenography and typewriting and printing.

Pennsylvania State College.-Three changes have been made during the past year in the organization of the work of the college, which are regarded as of more than passing importance:

1. The work of the college year has been divided into two semesters, with examinations at the close of each, in the place of three sessions with three examinations, as heretofore. Students enter the freshman year with very different qualities of preparation, representing almost every grade of preparatory work throughout the State (55 counties of Pennsylvania being represented in the college this year), and the consequence has been that many have proved unable to stand the test of examinations at the close of the fall session. Under the new arrangement, such students will continue advanced work until the Christmas holidays, and then return after a period of respite and refreshment to review and take examination on
the work of the first session. An additional advantage of the new arrangement is a better sequence and coordination of studies in different departments.
2. Increased provision has been made for electives in English, French, and German, history, political science, and philosophy, with a view to making the general courses as thorough and attrartive as the technical courses already are. In the general courses students may now drop mathematics at the end of the freshman year-that is, on the completion of college algebra, solid geometry, and plane and solid trigonometry-with an option subsequently between higher mathematics and certain branches of the general subjects above named.
3. The classical course has been thoroughly recast and expanded, with a view to making ample provision for such students as desire to take full work in Latin and Greek.

South Dakota Agricultural College.-Several important changes have been perfected in the courses of study. Forty-three courses above subfreshman are required of all candidates for the B.S. degree. These courses are quite uniform through the subfreshman and freshman years. After that, students may elect one study each term of the junior year and two each term of the senior year. Five of these electives must be in some one line of work, in which the student has already completed the amount required for graduation. All students are required to take one course in agricnlture and one in horticulture. These are prepared with special care, so as to emphasize the importance of these studies as life vocations and to show how scientific knowledge may be useful in the improvement of agricultural methods and processes. A shoirt course of twelve weeks' work in domestic science and another of two terms of twenty-four weeks in public-school drawing have been established. The institution is also conducting home reading courses, which are becoming quite popular throughout the State.

University of Tennessee. - The forr years' course leading to the degree of B. S. in agriculture has been rearranged and greatly strengthened. A twelve weeks' course in agriculture, beginning with the opening of the second term in January and continuing until its close, was established. This course is designed especially to present in a practical way the results of the scientific experiments, etc., in agriculture, horticulture, stock raising, dairying, ets. A professorship of horticulture and forestry was established and an enlarged course in horticulture was adopted. The session has been divided into three terms instead of two, as heretofore. This was done to bring the opening of the second term immediately after the Christmas holidays, and thus make provision for new students desiring to enter at that time.

Virginia Agricultural and Mechanical College.-Now course in bacteriology, also in Latin, making a three years' course in this language.

Hampton Nomal and Agricultural Institute.--While the courses in agriculture have been mach the same as during the previous years, it is felt that advance has been made along the following lines: Instruction in agriculture has been given to a larger number of pupils than heretofore; the time devoted to the subject has been extended; the method of presenting the subject to the pupils has been improved; a greater interest in the subject has been developed in the pupils; the amount of subject-matter treated has been enlarged. The junior class, which formerly received only one lesson per week, and that at night, has received four lessons per weok during the past year, and all in the daytime. All the girls in the day school, except the midale-class girls, received the same instruction that was given to the boys. The method of presenting the subject has been more of the laboratory and field-observation method. It has been nature teaching with a practical application to the farm.

Instruction in agriculture has been introduced into one of the county schools over which the institution has control. This school is located on the institute grounds and numbers from 300 to 400 pupils, ranging in age from 3 to 17 years.

This year a school garden was conducted for these children by way of experiment. The experiment was so successful that a permanent garden will be laid out this fall. One hundred and seventy beds, ranging in size from 3 by 4 feet to 10 by 20 feet, were laid out and two pupils assigued to each bed. Vegetables and flowers were planted. The children took great pride in having gardens of their own, and many gardens were started at home as a result of their work. Aside from this and the interest and pleasure the children took in the gardens, three ideas, important factors in the solving of the negro problem, seemed to stand out and develop in the minds of the children: (1) The idea of possession, brought out by the individual bed system; (2) the idea of production, brought out and strengthened by allowing the children to carry home the products of their gardens; (3) the idea of cooperation, by having much of the work done as class work, all doing the same kind of work during part of each period.

Washington Agricultural College.-The course in veterinary scjence has been extended to three years.

West Virginia Colored Institute. -The only change in methods of instruction was the correlation of subjects. This year, for the first time, it has been possible to place kindred subjects under the direction of one teacher.

University of Wisconsin.-At a meeting held April 17, 1900, the board of regents established a school of commerce to supply facilities for the training of young men who desire to enter business careers, especially in such fields as domestic and foreign commerce and banking, or branches of the public service, like the consular, in which a knowledge of business is essential. Students who complete the prescribed course of study will receive diplomas conferring upon them the degree of bachelor of commercial science.

## FARMERS" INSTITUTES.

According to the reports received from the agricultural and mechanical colleges endowed by acts of Congress, thirty-five of them took part in farmers' institute work during the year. The institutes are growing rapidiy in popularity, and the demand for them is becoming so great in some of the States that the question of supplying instructors at institutes by the agricultural colleges is becoming serious. The number of institutes held in Kansas has grown from 10 in 1888-89 to 136 in 1899-1900, and for the six months ending December 31, 1900, twenty-seven different speakers from the Kansas Agricultural College attended 153 farmers' institutes. One of the speakers attended 49 institutes, traveling 7,648 miles; another attended 20, traveling 3,346 miles. The number of institutes attended by the twenty-seven speakers is as follows:

| $\begin{gathered} \text { Number } \\ \text { of } \\ \text { teach- } \\ \text { ers. } \end{gathered}$ | Number of insti-tutesattended. | ```Number of teach- ers.``` | Number of institutes attended. | ```NTumber of teach- ers.``` | Number of institutes attended. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 49 | 1 | 11 | 1 | 5 |
| 1 | $4 \%$ | 1 | 10 | 3 | 4 |
| 1 | 43 | 2 | 9 | 1 | 3 |
| 2 | 20 | 1 | 8 | 3 | 2 |
| 1 | 16 | 1 | 7 | 7 | 1 |

In some of the States the farmers' institutes are under the direct control of the agricultural colleges, while in others they are under the management of the State secretary or commissioner of agriculture. Eiven when the institutes are not under: the control of the colleges these institutions furnish a great many of the lecturers. The following statements, made by the presidents of the several institutions, give some idea as to the wori done by the stalfs thereof in the line of farmers' institute work:

Alabama Polytechnic Institute.-One of the professors in the agricultural department was, two years since, appointed director of farmers' institutes. Since then a large part of every vacation is spent in conducting institutes with the farmers in different sections of the State. In some localities much interest is developed, and large numbers attend. In the past two years 25 institutes were held in 21 counties. In this way 2,090 farmers have received instruction of value.

University of Arizona.-The experiment station stair has organized, conducted, or materially assisted in nine farmers' institutes or agricultural conventions during the year.

University of Arkansas.-A pomologist was appointed by the board of trustees last year. During the year he attended a number of agricultural meetings in the State and arranged with some half dozen farmers in different sections of the State to make experiments in truit growing.

University of California.-About 80 farmers' institutes have been held during the year, with an average attendance of about 200 . The localities visited are required to bear local expenses, such as hall rent, printing, etc. The university from its general fund bears the compensation and traveling expenses of university speakers. The expenditure is about $\$ 4,000$ per year, and there is no State appropriation for this work. The institutes are increasing in popularity from year to year.

Colorado Agricultural College.-Institutes were held at fifteen points in the State, with increased interest and number in attendance. Thres things contributed to this increase: (1) The widening possibilities of the sugar-beet industry; (2) the threatened cantaloupe biight; (3) the renewed interest in stock interests on the part of the college. The best talent the college affords was sent to these gatherings. Help was given in arranging programmes.

Connecticut Agricultural College.-Nine of the college instructors have been in attendance upon farmers' institutes during the year. They always readily respond when called upon at institutes and grange meetings, speaking upon subjects related to agriculture, horticulture, and the mechanic arts.

Delaware College.-The staff of workers in the agriculiural department devoted a great deal of time during the winter months to lecturing at farmers' institutes, grange meetings, and other gatherings of farmers and fruit growers.

Florida Agricultural College.-Several farmers' institutes have been held in different parts of the State. These have been under the direction of the professor of agriculture, and he has been assisted by several other members of the college faculty. The expenses of these meetings have been borne largely by the communities in which the institutes have been held. The attendance has been fair and the results gratifying.

Georgia State College of Agriculture and Mechanic Arts.-No systematic work in farmers' institutes was done this year. The president, on invitation and at his own expense, attended and addressed ten meetings of farmers.

Georgia State Industrial College.-A farmers' institute was held at the college on March 5, 1900. It was well attended and did much good.

University of Idaho.-Farmers' institutes have been held in nearly every important agricultural center in the State, which have been well attended and productive of much interest. A farmers' short course was given at the university also, which was regularly attended for a month by 31 practical farmers, none of whom were regular students.

Purdue University (Indiana).-The State appropriation of $\$ 5,000$ has been inadequate of late years to meet the increasing demands of farmers' institutes. This sum is supplemented by appropriations from the university funds which pay the salary of the superintendent and the general expenses of adninistration. The university also places its corps of professors at the disposal of the institutes as lecturers. During the past year there were held, under the direction of the superin-
tendent, 104 regular institutes, and in addition to these, about 45 independent or supplementary institutes.

Iowa State College of Agriculture and MPechanic Arts.-The members of the faculty, especially of the experiment station and agricultural departments, take aus astive part in institute woris throughout the season. The law is such that the work is not under the supervision of the college, but the college authorities aid in every way practicable in the development and work of the farmers' institutes.
Kansus State Agricultural College.-Farmers' institutes have been organized in about 60 counties of the State, in which from two to four members of the faculty share with the people in lectures, essays, and discussions upon topies of most interest to farmers and their families. There were hell during the year 136 institutes. The extraordinary growth of this work is shown by the following tabular statement:

| Year. | Institutes. | Year. | Institutes. |
| :---: | :---: | :---: | :---: |
| 1888-89. | 10 | 1894-95. | 22 |
| 1889-90... | 8 | 1393-96. | 28 |
| 1890-91- | 11 | 1896-97. | 19 |
| $\begin{aligned} & 1891-92-- \\ & 189293 \end{aligned}$ | 11 | 1897-98 - | ${ }^{30}$ |
| 1893-94 | 17 | 1899-1900 | 136 |

State Normal School for Colored Persons (Kentucky).-During commencement week "Agricultural Day" was a number on the programme. Farmers from the neighborhood were present and took part in the discussions. The following are some of the subjects discussed: Industrial development: How to manage a farm; Need of educated mechanics; Poultry raising by farmers wives and danghters; Need of educated cooks; Dairying as a business; Sewing in the home.

Louisiana State University.-A very successitul series of farmers' institutes was held during the summer and fall of 1899 by the state commissioner of agriculture, most of the work being done by members of the university faculty and experiment station staff.

University of Muine.-There have been given at the university a series of institutes, continuing four days, of a rather higher grade of work than the ordinary farmers' institutes. In addition the director of the experiment station, the professor of horticulture and the professor of animal industry have attended about 150 institutes.

Massachusetts Agricultural College.-Seven members of the faculty have participated in farmers' institute work, averaging seven or eight institutes each.

Michigan Agricultural College.-The college has always taken an active part in farmers' institutes. For a number of years the faculty carried on this work without State aid. In recent years, however, the State has made an appropriation for this purpose, the amount for last year being $\$ 5,500$. The director of the experiment station is also superintendent of farmers' institutes. In this way the college keeps in close touch with this work. The members of the faculty take an active part and go from county to county addressing the meetings. Quite a number of them give up several weeks each year to this work; also a number of graduates of the college, who are now successful farmers, are among the principal State speakers. About 67 two-day institutes and 90 one-day institutes were held during the past year in all but about half a dozen counties of the State.

Mississippi Agricultural and Mechanical College.-There were held during the year about 30 farmers' institutes, which were a great success from every standpoint. The last legislature made an appropriation for this work.

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Montana College of Agriculture and Mechanic Arts.-Institutes were held in several localities of the State, but the attendance was small. The work was done entirely under the supervision of the director of the experiment station.

University of Nebraska.-Fifty-one farmers' institutes were held by the university during the months of January. February, and March, covering all portions of the State. For this purpose $\$ 1,500$ was expended by the State superintendent of farmers' institutes, Prof. E. A. Burnett, head of the department of animal husbandry in the university. He was assisted in his work by specialists from the United States experiment station and the university, by speakers employed for special addresses, and by various State societies. All railroads generously furnished a large amount of transportation for these institutes. The meetings were well attended and successíul throughout the State.

New Mexico College of Agriculture and Mechanic Arts.-One farmers' institute was held in November, 1899, at Aztec, in the northwestern part of the Territory. This was gotten up by the superintendent of the branch station at Aztec and largely conducted by the professor of agriculture. The frequent changes in the headship of the agricultural department of the college have conspired with the sparse population of the Territory and its great extent to prevent the college from doing much in the way of institute work. The principal railroads of the Territory have agreed to grant free transportation to the members of the staff when engaged on agricultural experiment station business, and it is believed that this concession of the railroads will enable the college to do more in the way of institute work and other extension work than ever before.

North Carolina College of Agriculture and Mechanic Arts.-Institutes have been conducted by the professors of agriculture and horticulture and by the instructors in animal industry and horticulture in conjunction with the State department of agriculture.

North Dakota Agricultural College.-The farmers institute work in North Dakota is in charge of the assistant dairy commissioner, Prof. E. E. Kaufman, who is at the head of the department of dairying in the college. For the year ending June 30, 1900, 25 institutes were held, at which the attendance numbered 3,710 . The director and members of the station staff were called upon to speak at the different institutes, and their work was of great practical value to the farmers of the State. The principal subjects discussed were: Crop rotation, maintaining the fertility of our soil, the cultivation of cereal crops, the selection of seed, the prevention of plant diseases, weeds and how to destroy them, the growing of forage crops, dairying, breeding and feeding live stock, relation of the agricultural college and experiment station to the industrial interests of the State.

Ohio State University.-The president and members of the faculty, during the past year, have participated in 54 farmers' institates and delivered 54 lectures.

Oklahoma Agricultural and Mechanical College.-A persistent effort was made during the year to organize a system of farmers' institutes, but resulted in complete fiailure. But one institute was attended, and the attendance at this was very small. In the absence of some definte institute organization, so that meetings may be arranged in a circuit and attended without wasteful loss of time and experse, it appears that the institution must seek another way of doing this work. This it is doing, to a large extent, through correspondence and by attendance at the meetings of the different agricultural and live-stock associations which are held in the Territory. Three of these associations will hold their next meetings here, all of them beginning on the 4th day of December and continuing for several days.

Oregon State Agricultural College.-During the past year 12 farmers' institutes have been held under the auspices of the experiment station, with a total attend. ance of about 1,650 persons. In adaition to regular institutes, seven special
lectures on dairying and diversified agriculture have been given, with a total attendance of about 700 persons.

Pennsylvania State College.-The farmers' institutes in the State are under the control of the State department of agriculture, but the college regularly furnishes the full time of three or four of its men as lecturers and instructors for a period of about three months. Two members of the board of trustees are also engaged in the same way.

Clemson Agricultural College (South C'arolina).-During the past year farmers, institutes were held, under the management of the college, in many counties of the State. The president and professors of agriculture, chemistry, horticulture, dairying, veterinary science, botany, and other members of the faculty have taken part in these institutes. The purpose has been to bring practical information to the farmer, and to give him the results of scientific investigation in the interest of agriculture. The success thus far attained is most encouraging, and leads to the hope that these institutes may become a permanent feature in the work of the college. A special institute of ten days' duration is held at the college during the moath of August.

Colored Normal, Industrial, Agricultural and Mechanical College (South Caro-lina).-Farmers' institutes were held by Thomas E. Miller, director of farm and lecturer on farming, and J. W. Hoffman, professor of agriculture, in 22 counties of the State.

South Dakota Agricultural College. -The last legislature appropriated $\$ 2,000$ for farmers' institutes, making possible the employment of some help outside the college faculty for a part of the year. There were held during the year 24 very successful institutes, with an average attendance of 100 people.

University of Tennessee.-During the year the maiversity assisted the State commissioner of agriculture in holding institutes in different portions of the State. Institutes were held thus at about 20 different points, at each of which two or more of the professors and assistants were present and took part in the exercises. The interest in farmers' institutes continues to grow, and it is belioved that they are doing great good in awakening farmers to study their business as a profession. The trustees and officers of the university are greatly gratified to report that the State is furnishing good support for these institutes.

Agricultural College of Utah.-During the past year, as required by State law, farmers' institutes have been held in different counties of the State by meunbers of the faculty. The State provides a fund of $\$ 1,500$ annually for this purpose. In addition to the meetings held in different counties, a central institute was held at Ogden lasting three days, at which agricultural questions were discussed by members of the faculty and others. The proceedings of this central institute have been published in pamphlet form, and are distributed free among the farmers of the State.

University of Vermont and State Agricultural College.-Members of the faculty have aftended meetings of the board of agriculture, and have given addresses in connection with these meetings and on other occasions.

Virginia Agricultural and Mechanical College.-Professors spole at 3 institutes during the year.

Washington Agricultural College.-About 20 farmers institutes were held during the year with an average attendance of about 100. The interest has been very great in this work and the demand beyond the ability of the institution to supply.

West Virginia University.-The dean of the college of agriculture has attended and spoken at a large number of farmers' institutes. Members of the experiment station staff have also spozen at institutes.

University of Wisconsin.-A carefully supervised system of farmers' institutes is maintained. The institutes are in immediate charge of a superintendent, who
elaborates and controls the organization and execution of the institutes. He is aided by special conductors, who assist in perfecting the details and carrying the whole into effect. Members of the agricultural faculty render as much assistance as is consistent with their other duties. Experts in dififerent departments are engaged to present special important themes. Lecturers are often brought from other States to treat on specific topics in which they are recoonized authorities. Local talent is used to some extent, and not the least of the educational benefits is the development of latent ability in writing, speaking, and experimenting, which has followed as a natural result of the interest awakened by this important stimulus. Institutes are placed for the most part in localities which show the greatest interest in this movement. Applications for institutes will bo received by the superintendent and presented to the agricultural committee by September 30. The committee goes over the list and carefully considers the needs and interests of each locality and places the institutes where in its judgment they will prove the most helpful. Generally, there have been far more applications for institutes than it was possible to supply. Institutes were conducted during the year as follows: Summer, 1899: 12 one-day institutes and 1 three-day closing institute; winter, 1899-1900: 100 two day institutes and 1 three-day round-up institute; 10 cooking schools of two sessions each were held in connection with the winter institutes.

GOVERNING BOARDS.
The methods of choosing the governing boards of the several institutions endowed by the acts of Congress of July 2, 1862, and August 30, 1890, vary greatly in the different States and Territories. In three States-Illinois, Nebraska, and Nevada-the governing boards are elected by popular vote. In several States they are elected by the State legislatures; several are self-perpetuating, but in a large majority of the States they are appointed by the governor, by and with the advice and consent of the senate. In the following pages are given, under the names of the several institutions, the titles of the governing boards, the ex officio members, the number of other members, by whom chosen, the length of term, and such other particulars as it has been possible to obtain.
Alabama Polytechnic Institute.-Board of trustees consisting of goveinor, State superintendent of education, ex officio; 1 member appointed by the governor for a term of six years from each Congressional district, except that the district in which the institution is located is entitled to two members.

Agricultural and Mechanical College for Negroes (Alabama).-Board of commissioners consisting of 3 members named in the ast establishing the institution and who may fill any vacancy that may occur in the board.

University of Arizona.-Board of regents consisting of governor, State superintendent of public instruction, ex officio; 4 members appointed by the governor.

University of Arkansas.-Board of trustees consisting of governor, ex-officio; 6 members appointed by the governor and confirmed by the senate for terms of six years, the terms of 2 members expiring every two years.

Branch Normal College (Arkansas).-Governed by board of trustees of University of Arkansas. (See above).

University of California.-Board of regents consisting of governor, lieutenantgovernor, speaker of assembly, State superintendent of public instruction, president or State Agricultural Society, president of Mechanics' Institute, president of the university, ex officio; 16 members appointed by the governor and approved by the senate for terms of sixteen years.

Colorado Agricultural College.-State board of agriculture consisting of governor, president of the agricultural college, ex officio; 8 members appointed by the
governor and confirmed by the senate for term of eight years, the terms of 2 members expiring every two years.

Connecticut Agricultural College.-Board of trustees consisting of governor, director of Connecticut Experiment Station. ex officio; 6 members elected by the State senate for terms of four years; 1 member elected by the alumni; 1 member elected annually by the State board of agricu?ture.

Deluware College.-Board of trustees consisting of governor, president of Delaware College, ex officio; 15 members representing the original board who have power to fill all vacancies arising in their number; 15 members appointed by the governor, 5 from each of the 3 counties in the State.

State College for Colored Situdents (Delaware).-Board of trustees consisting of. the president of the college, ex officio; 6 members, 2 from each county in the State, appointed by the governor for terms of four years or until their succescors shall be appointed.

Florida State Agricultural College.-Board of trustees consisting of 7 members appointed by the governor and confirmed by the senate for terms of four years, Not more than two may be appointed from the county in which the college is located.

Florida State Normal and Industrial College for Colored Students.-State board of education consisting of governor, State superintendent of public instruction, secretary of State, attorney-general, State treasurer, er oficio.

Georgia Siate College of Agriculture and Mechanic Arts.-Board of trustees of University of Georgia consisting of governor, president of board of trustees of State School of Technology, president of board of commissioners of Georgia Normal and Industrial College, president of board of commissioners of Georgia Industrial College for Colored Yoaths, ex officio; 1 memler from each Congressional district, 4 from the State at large, and 2 from the city of Athens appointed by the governor and conirmed by the senate.

Georgia State Industrial College for Colored Youths.-Under control of the board of trustees of the University of Georgia. The local board of commissioners consists of 5 members originally appointed by the governor. They havepower to fill all vacancies arising in their number.

University of Idaho.-Board of regents consisting of 9 members appointed by the governor and confirmed by the senate for terms of six years.

University of Illinois.- Board of trustees consisting of governor, president of State board of agricuiture, State superintendent of public instruction, ex officio; 9 members elected by popular vote, 3 at each biennial election, for a period of six years.

Purdue University (Indiana).-Board of trustees consisting of 9 members appointed by the governor for terms of four years. The State board of agriculture has the privilege of nominating 2 members and the State horticultural society 1 member.

Iouru State College of Agriculture and Mechanic Arts.-Board of trustees consisting of governor, State superintendent of public instruction, ex officio; 1 mem ber from each Congressional district, elected by the State legislature for a term of six years.

Kansas State Agricultural College.-Board of regents consisting of the president of the college ex officio, and 6 members appointed by the governor and confirmed by the senate for terms of four years.

Agricultural and Mechanical College of Kentucky.-Board of trustees consisting of governor, president of the college, ex officio; 15 members appointed by the governor, one-third every two years, for terms of four years.

State Normal School for Colored Persons (Kentucky).-Board of trustees con-
sisting of State superintendent of public instruction ex oficio; 3 members, residents of Franklin County, appointed by the governor and approved by the senate, for terms of three years.

Louisiana State University.-Board of supervisors consisting of governor, State superintendent of public education, president of university, ex officio; 12 members appointed by the governor and confirmed by the senate, 3 being appointed each year for terms of four yoars.

Southern University (Louisiana).-Board of trustees consisting of 12 members appointed by the governor and confirmed by the senate for terms of four years; at least 4 of the 12 shall be appointed from the colored race.

University of haine. - Board of trustees consisting of 7 members appointed by the governor for terms of seven years; 1 member named by the alumni for a term of three years.
Maryland Agricultural College.-Board of trustees consisting of governor, comptroller of treasury, attorney-general, State treasurer, president of the senate, speaker of the house of delegates, ex officio; 1 member appointed by the governor from each Congressional district for a term of six years; 5 members elected by the stockholders and serving for one year or until their successors are elected.
Massachusetts Agricultural College.-Corporation consisting of governor, president of college, secretary of the board of education, secretary of the board of agriculture, ex officio; 14 members appointed by the governor, 2 annually, for terms of seven years. The alumni exercise the right of recommendation of candidates.

Massachusetts Institute of Technology.-Corporation consisting of governor, chief justice of supreme court, secretary of the board of education, ex officio; not more than 47 members to hold office for life and to be chosen by vote of the corporation by ballot.
Michigan State Agricultural College.-State Doard of agriculture consisting of governor, president of college, ex officio; 6 members appointed by the governor for terms of six years.

University of Minnesota.-Board of regents consisting of Hon. John S. Pillsbury, life member; governor, State superintendent of public instruction, president of university, ex officio; 9 members appointed by the governor and confirmed by the senate for terms of six years.
Mississippi Agricultural and Mechanical College.-Board of trustees consisting of governor, State superintendent of education, ex oficio; 9 members appointed for terms of six years by the governor with the consent of the senate, 1 to be chosen from each Congressional district and the remainder from the State at large, 5 of whom shall be chosen from practical agriculturists or mechanics, or selected from both, as may be deemed advisable; one-third are appointed every two years.

Alcorn Agricultural and Mechanical College (Mississippi).-Board of trustees consisting of governor, State superintendent of education, ex officio; 9 members appointed for terms of six years by the governor with the consent of the senate. 1 to be chosen from each Congressional district and the remainder from the State at large, 5 of whom shall be chosen from practical agriculturists or mechanics, or selected from both, as may be deemed advisable; one-third are appointed every two years.

University of the State of Missouri.-Board of curators consisting of 9 members appointed by the governor and confirmed by the senate for terms of six years, one-third of the members being appointed every two years; not more than 1 can be appointed from the same Congressional district.

Lincoln Instituve (IIVissouri).-Board of regents consisting of State superintendent of public schools ex officio; 6 members appointed by the governor, 2 every two
years, for terms of six years, who shall reside in the normal-school district for which they are appointed.

Montana College of Agriculture and Mrechanic Arts.-The general control of the institution is in the hands of the State board of education, consisting of governor, attorney-general, State superintendent of public instruction, ex offcio; 8 members appointed by the governor and confirmed by the senate, 2 each year, for terms of four years.

The direct supervision is vested in an executive board of 5 members, 1 of whom is appointed yearly by the governor, subject to the approval of the State board of education.

University of Nebraska.-Board of regents consisting of 6 members, one-third elected every two years for terms of six years by popular vote.

Nevada State University.-Board of regents consisting of 3 members elected by popular vote, the terms of 2 members expiring every two years. At each election 1 member is elected for a term of two years and the other for a term of four years.

New Hampshire College of Agriculture and Hechanic Arts.-Board of trustees consisting of governor, president of college, ex officio; 1 member elected by the alumni for a term of three years; 10 members appointed by the governor with the advice of the council, 1 at least from each councilor district and so classified and commissioned that the terms of 3 trustees shall become vacant annually. Not more than $\overline{5}$ of the trustees appointed by the governor and council shall belong to the same political party, and at least 7 of them shall be practical farmers.

Rutgers Scientific School (New Jersey). - Board of trustees of Rutgers College consisting of governor, chief justice, attorney-general, ex officio; 36 members, of whom two-thirds must be communicants in the Reformed (Dutch) Church.

Under supervision of a board of visitors consisting of 2 members from each Congressional district, appointed by the governor for a term of two years.

New Hexico College of Agrichilture and Mechanic Arts.-Board of regents consisting of 5 members appointed by the governor and confirmed by the legislature for terms of five jears, the term of 1 member expiring each year. The governor and Territorial superintendent of public instruction are ex officio advisory members of the board.

Cornell University (New York).-Board of trustees consisting of eldest male lineal descendant of Ezra Cornell, president of university, governor, lieutenantgovernor, speaker of the assembly, State superintendent of public instruction, commissioner of agriculture, president of State Agricultural Society, librarian of Cornell library, ex officio; 20 members elected by the board, 4 each year, for terms of five years; 10 members elected by the alumni, 2 each year, for torms of five years.

North Carolina College of Agriculture and Mechanic Arts.-Board of trustees consisting of president of college ex officio; 21 members elected by the State legislature for terms of six years, 1 from each Congressional district and 12 from the State at large.

Agricultural and Mechanical College for the Colored Race (North Carolina).Board of trustees consisting of 15 members elected by the State legislature for terms of six years, 1 from each Congressional district and 6 from the State at large.

North Dakota Agricultural College.-Board of trustees consisting of \% members appointed by the governor and confirmed by the legislature for terms of six years.

Ohio State University.-Board of trustees consisting of 7 members appointed by the governor and confirmed by the senate for terms of seven years, the term of 1 member expiring each year.

Oklahoma Agricultural and Mrechanical College.-Board of regents consisting of governor ex officio; 5 members appointeả by the governor, with the approval of the council, for a term of two years or until their successors are appointed.

Colored Agricultural and Normal University (Ollahoma). - Board of regents consisting of Territorial superintendent of public instruction, Territorial treasurer, ex officio: 3 members appointed by the governor.

Oregon State Agricultural College.-Board of regents consisting of governor, secretary of state, State superintendent of public instruction, master of State grange, ex officio; 9 members appointed by the governor and confirmed by the senate for terms of nine years.

Pennsylvania State College.-Board of trustees consisting of governor, secretary of state, president of college, president of State Agricultural Society, secretary of internal affairs, adjutant-general, State superintendent of public instruction, president of Franklin Institute, secretary of State board of agriculture, ex officio; 3 members, 1 elected annually by the alumni; 12 members, 4 elected annually by a body of electors composed of the executive committee of the Pennsylvania State Agricultural Society, the managers of the Franklin Institute of Pennsylvania, 3 representatives duly chosen by each county agricultural society which shall have been organized at least three months preceding the time of election, and 3 representatives duly chosen by each association, not exceeding one in each county, which shall have for its principal object the promotion and encouragement of the mining and manufacturing interests of the Commonwealth and the mechanical and useful arts and which shall, in like manner, have been organized at least three months preceding the time of election.

Rhode Island College of Agriculture and Mechanic Arts.-Board of managers consisting of 5 members appointed by the governor.

Clemson College (South Carolina).-Board of trustees consisting of 7 life membera originally designated by will who have the right to fill all vacancies happening in their number and 6 members elected by the Stato legislature.

Colored Normal, Industrial, Agricultural and Mechanical College (South Caro-lina).-Board of trustees consisting of governor ex officio; 6 members elected by the State legislature, 2 every two years, for terms of six years.

South Dakota Agricultural College.--Regents of education consisting of 5 mem bers appointed by the governor and confirmed by the Senate for a term of six years. The immediate supervision of the college is delegated to a committee, consisting at present of 2 members.

University of Tennessee.-Board of trustees consisting of governor, secretary of state, State superintendent of public instruction, ex officio; 30 members elected by the board for life from the different Congressional districts and approved by the legislature. The president of the university is ex-officio president of the board of trustees.

Agricultural and Mechanical College of Texas.-Board oî directors consisting of 8 members appointed by the governor from the different portions of the State for terms of six years.

Prairie View State Normal and Industrial College (Texas).-Controlled by the board of directors of the Agricultural and Mechanical College of Texas. (See above.)

Agricultural College of Utah.-Board of trustees consisting of $\tau$ members appointed by the governor and confirmed by the senate for terms of four years.

University of Vermont and State Agricultural College.-Board of trustees consisting of governor, president of university, ex officio; 9 members who have the right to fill all vacancies arising in their number; 9 members elected by the State legislature, 3 every two years, for terms of six years.

Tirginia Agricultural and Mechanical College and Polytechnic Institute.-Board of visitors consisting of State superintendent of public instruction ex officio; 8 members appointed by the governor and confirmed by the senate, 4 every two years, for terms of four years.

Hampton Normal and Agricuitural Institute (Virginia).-Board of trustees,
self-perpetuating, consisting of 17 members. The State curators, 6 in number, appointed by the governcr for a term of four years, attend the annual meetings of the trustees, examine the condition of the school, its finances, etc.

Washington Agricultural College.-Board of regents consisting of 5 members appointed by the governor and confirmed by the senate for terms of six years. The governor is ex officio an advisory member of the board.

West Tirginia University.-Board of regents consisting of 9 members appointed by the governor for terms of six years.

West Virginia Colored Institute.-Board of regents consisting of 5 members, not more than 3 of whom shall belong to the same political party, appointed by the governor, from time to time, as the occasion may requile.

University of Wisconsin.-Board of regents consisting of president of university, State superintendent of public instruction, ex officio; 1 member from each Congressional district, and 2 from the State at large, appointed by the governor for terms of three sears.

University of Wyoming.-Board of trustees consisting of State superintendent of public instruction, president of university, ex officio; 9 members appointed by the governor and confirmed by the Senate for terms of six years, 3 baing appointed every two years.
Statistics for 1899-1900 of institutions endowed by the acts of Congress approved July 2, 1862, and August 30, 1890, with public lands, or a


Statistics for 1890-1900 of institutions cndowed by the acts of Congress approved July , 1869, and August 30, 1890, etc.-Continued.


Statistics for 1899-1900 of institutions endoved by the acts of Congress approved July 2, 1869, and, August 30, 1890, etc.-Continued.

|  |  | Libr | ary. |  |  |  | and. |  | Value of | buildings. | Value of m | other equip)ent. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Institution. | Volumes. | Pamphlets. | Endowment funds. | Total number of acres. | Acres under culti- vation. | $\begin{gathered} \text { Acres } \\ \text { nsed } \\ \text { for } \\ \text { experi- } \\ \text { ment } \end{gathered}$ | Value. | Total. | Used for instruction in branches specified in act oĺ Aug 30, 1890. | Total. | $\begin{aligned} & \text { Used for } \\ & \text { instruc- } \\ & \text { tion in } \\ & \text { branches } \\ & \text { specified in } \\ & \text { act of Aug. } \\ & 30,1890 \text {. } \end{aligned}$ |
|  | Alabama Polytechnic Institut | 13,957 | 800 | 82353,500 | 304 | \% | 30 | \$3,000 | \$142,000 | \$127, 800 | \$75,000) | \$67,500 |
| 2 | Agricultural and Mechanical College for Negroes <br> (Alabara) | 3,047 | 2,010 |  | 182 | 84 |  | 10,000 | 29,654 | 29,654 | 11,966 | 1,966 |
| 3 | University of Arizona | 5,000 |  | 0 | 80 | 40 | $40^{-1}$ | 4,000 | 98, 600 | 48, 100 | 44, 747 | 44, 747 |
| 4 | University of Arkansas | \$,000 | 7,499 | 130,000 | 160 | (i0) | 30 | 9,600 | 233,500 | 183,500 | 49, 717 | 40, 717 |
| 5 | Branch Normal College (Arkansas) | 4,164 | 910 |  | 20 | : 0 | 20 | 3:20 | 18,000 | 18,000 | 12,500 | 11,500 |
| 6 | University of California - .......... | 79, 010 | 20,000 | 2, 828,254 | 411 | 182 | 18\% | 193, 12\% | 718,744 | \%18, 744 | 375, 060 | 375, 010 |
| 7 | Colorado Agricultural College | 10,000 |  | 228,500 | 240 | 160 | 40 | 24,000 | 148,849 | 148, 84.9 | 77, 327 |  |
| 8 | Connecticut Agricultural College | 17.000 | 1,000 | 133,000 83,000 | 330 | 135 | 10 4 | 16,006 3,000 | 75, 7900 | 45,000 68.300 | 53,000 | 4,000 49,000 |
| 10 | Delaware Collego - Colored Students (Delaware) | 11.600 350 | 2,500 150 | 83,000 | 14 97 | 9 | 4 | 3,000 6,000 | 12,800 | 12,800 | 9,000 | ¢, 000 |
| 11 | Florida Agricultural College. | 3,500 |  | 153, 800 | 155 | 93 | 93 | 11,000 | 50,000 | 50,090 | 18,800 | 18,800 |
| 12 | State Normal and Industriai College (Florida) | 74 | 650 |  | 137 | 116 | 4 | 8,805 | 20,500 | 20,500 |  |  |
| 13 | Geurgia State College of Agriculture and Mechanic Arts | 30,547 | 8,992 | 242, 20, | $1: 2$ | 100 |  | 10,000 | 300, 000 | 200,000 | 500,000 | 400, 000 |
| 14 | Georgia Industrial College for Colored Youths | 310 | 410 | - 0 | 86 | 30 | 0 | 1,400 | 330,483 | 27,933 | 3,144 | 2,944 |
| 15 |  | 4,000 | 1,700 | 50,000 | 115 | 115 | 110 | 5, 200 | 175,000 | 122,300 | 47,000 | 40. 800 |
| 16 | University of Illinois | 44,000 | 3,500 | 501, 99: | 665 | $(100$ | 100 | 100,000 | 3, 000, 000 | 885, 000 | 365,000 | 310.000 |
| 17 | Purdue University (Indiana) | 10,051 | 3,2\% | 340,000 | 190 | 149 | 90 | 60,000 | 357,000 | 31\%,000 | 298,000 | 288,000 |
| 18 | Iowa State College of Agriculture and Mechanic | 12,440 |  | f:82, 834 | 841 | 400 | 80 | 57, \%68 | 460,975 | 350,975 | 236,584 | 171,584 |
| 19 | Kansas State Agricultural College | 21,450 | 17,000 | 503, 848 | 323 | 323 | 253 | 39,700 | 270,400 | 270,400 | 173,000 | 173,000 |
| 20 | Kentucky Agricultural and Mechanical College -. | 4,009 | \%,629 | 144, 075 | 170 | 60 | 61 | 40,000 | 125,500 | 125,500 | 426,000 | 4:26,000 |
| 21 | State Normal School for Colored Persons (Kentucky) | \%04 | 1,000 | 20, 925 | 300 | 100 | 15 | 17,500 | 22,093 | 11,468 | 10,000 | 8,14 |
| 22 | Louisiana State University and Agricultural and Mechanical College. | 21,000 | 2,000 | 318,313 | 583 | 310 | 200 | 33,300 | 150,000 | 150,000 | 50, 000 | 50,000 |
| 23 | Southern University (Louisiana) | :2,603 | 1,250 |  | 104 | 40 | 20 | 6,009 | 45,385 | 45,395 | 11,167 | 11, 167 |
| 24 | University of Maine | 17,200 | 7,500 | 219,900 | 373 | 120 | 20 | 25,000 | 182,241 | 120,494 | 39,510 | 18, 698 |
| 25 | Maryland Agricultural College | $3.010$ | 2,000 | 105,000 | 286 | 140 | 40 | 28,600 <br> 37 <br> 000 | 85, 0109 |  | 32,000 | 18,000 |
| ${ }_{27} 27$ | Massachusetts Agricultural Collego - | 21,075 |  | $\begin{array}{r} 360,575 \\ 3,039,206 \end{array}$ | 425 | 300 | \% 5 | 37,000 | 213,775 711,048 | ${ }_{5}^{17 \% 2,000}$ | $8,5,337$ 200,000 | 200,000 |
| 27 <br> 28 <br> 8 | Massachusetts Institute of Tuchnolog Michigan Agricultural College...... | 510, 1989 | $14,67 \%$ 4,000 | $\begin{array}{r}3,039,206 \\ 818,944 \\ \hline\end{array}$ | 671 | 500 | 50 | 46,970 | 341, 0 \% | 329,070 | 201,573 | 190, 435 |
| 29 | University of Minnesota. | 60,000 |  | 1,363,815 | 250 | 210 | 160 | 3009000 | 1,000,000 | 760, 000 | 277, 000 | 210,000 |
| 30 | Mississippi Agricultural and Mechanical College... | \%,533 | 8,568 | 98,575 | 1.961 | 450 | 50 | 42,605 | 136, 800 | 41.80C | 130,036 | 36,096 |
| 31 | Alcorn Agricultural and Mechanical College <br> (Mississippi) | 5,200 | 2,000 | 113,575 | 380 | 130 | 8 | 5,000 | 60,000 | 57,500 | 65,000 | 64,100 |







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| 32 | University of tho State of |
| :---: | :---: |
| ) | Missouri School of Mines and Metallurgy |
| 4 | Lincoln Institute (Missouri) |
| 35 | Montana College of Agriculture and Mechanic Arts |
| 36 | University of Nebraska ........... |
| 37 | Nevada State Universit |
| 38 | New Hampshire College of Agriculture and Mechanic Arts. |
| 9 | Rutgers Scientific School (New Jersey) |
| 40 | New Mexico College of Agriculture and Mechanic Arts |
| 41 | Cornell University (New York) |
| 42 | North Carolina College of Agriculture and Mechanic Arts. |
| 43 | Agricultural and Mechanical College for the Colored Race (North Carolina) |
| 44 | North Dakota Agricultural College |
| 45 | Ohio State University |
| 46 | Oklahoma Agricaltural and Mechanical College |
| 47 | Colored Agricultural and Normal University <br> (Oklahoma) |
| 48 | Oregon State Agricultural Col |
| 9 | Peunsylvania State College |
| 50 | Rhode Island College oỉ Agriculture and Mechanic <br> Arts |
| 51 | Clemson Agricultural College (Soutl Carolina) |
| 52 | Colored Normal, Industrial, Agricultural and Mechanical College (South (Tarolina) |
| 3 | South Dakota Agricultural College |
| 54 | University of Tennesseo. |
| 55 | Agricultural and Mechamical College of Texas |
| 56 | Prairie View State Normal and Industrial College <br> (Texas) |
| 5 \% | Agricultural College of Utah |
| 58 | University of Vormont and State Agricultural College. |
| 59 | Virginia Asricultural and IJechanical College |
| 60 | Hampton Normal and Agricultural Institute (Virginia) |
| 1 | Washington Agricultural College |
| , | West Virginia University |
| 3 | West Virginia Colored Institute |
| 4 | Tniversity of Wisconsin |
| 65 | University of Wyoming |




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응웅융응


| Nevada State University | 21,490 | 17,000 |  |
| :---: | :---: | :---: | :---: |
| New Hampshire College of Agriculture | 798 | 10,500 | 4,800 |
| Rutgers Scientific School (New Jersey) | 0 |  | 6,481) |
| New Mexico College of Agriculture and | 483 | 6,711 | 0 |
| Cornell University (New York) | 38,3:8 |  | 34, 428 |
| North Carolina College of Acriculture and Mechanic Arts | 0 | 10,000 | 7,500 |
| Agricultural and Mechanical College for the Colored Race (North Carolina) | 0 | 7,500 | 0 |
| North Dakota Agricultural Coilege | 25,153 |  | 0 |
| Ohio State University | 9,088 | 166,0\%6 | 33,204 |
| Oklahoma Agricultural and Mechanical Col | 49,915 | 28,480 |  |
| Colored Agricultural and Normal University (Olklahoma) |  | 18,877 | 0 |
| Oregon State Agricultural College | 6,115 | 30,293 | 12,323 |
| Pemnsylvania State College |  | 33,159 | :25,637 |
| Rhode Island College of Agriculture and Mechanic Arts |  | 15,000 | 2,590 |
| Clemson Agricultural College (South Cavolina | 39,291 | 59,000 | 5,754 |
| Colored Normal, Industrial, Agricultural and Mechanical College (South |  |  |  |
| Caroma) | 1.202 | 8,000 | 5,754 |
| South Dakota Agricultural Coliege | 1,329 | 40,000 |  |
| University of Temnessee |  |  | 23,960 |
| Agricultural and Mechanical Colloge of Texas | 4,355 | 28,400 | 14,280 |
| Prairie View State Normal and Industrial College (Texas) |  | 35,325 | 0 |
| Agricultural College of Utah | 467 | 18,300 |  |
| University of Vermont and State Agricuitural | 3.506 | 6,000 | 8,130 |
| Virginia Agricultural and Mechanical College |  | 15,000 | 20,559 |
| Hampton Normal and Agricultural Instituto (Virginia) |  |  | 10,329 |
| Washington Agricultural College | 2,554 | 23,210 |  |
| West Virginia University | 52,643 | 108,300 | 6,168 |
| West Virginia Colored Institute | 1,876 | 21,350 |  |
| University of Wisconsin |  | 270,000 | 11,740 |
| University of Wyoming | 15,48:3 | 14,845 | 0 |

## CHAPTER XXXVII.

## STATISTICS OF NORMAL SCIIOOLS.

This chapter summarizes and gives in detail the statistics of public and private normal schools. A list is given of the universit'es and colleges having departments of pedagogy and those offering courses for the training of teachers. A table appiars in the summaries giving the number of public and private high schools having teachers training courses and the number of students pursuing such courses.
The public and private normal schools reported for the year 1899-1900 students in the training courses for teachers proper to the number of 69,593 , while in all cther institutions there were 28,749 students pursuing such courses ot study, making a grand total of 98,342 normal students for the United States.
The 172 public normal schools had 2,171 instructors, 47,421 students, and 9,072 graduates, while the 134 private normal schools had 917 instructors, 22,172 strudents, and 2,321 graduates.
The following table will give some indication of the progress made by the public and private normal schools since 1890:


The growth of public normal schools has been constant, while the progress of private normal schools has shown many variations. Since 1896-97 the number of private normal schools has fallen from 198 to 134. Some weaker institutions have ceased to exist, while others have become private secondary schools. The 134 remaining schools have become stronger, having reported 23,172 normal students for 1899-1900 as against the 21,293 reported by the 193 schools in 1996-97.
The steady growth of the public normal school is well illustrated by the following table, which shows the amounts of public appropriations received each year since 1890 for support and for buildings and improvements:

Public appropriations to public normal schools for 11 years,

| Year. | For sup- port. | For build ings. | Year. | For support. | For builaings. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1889-90 | \$1,312,410 | \$306, 533 | 1595-96 | 92, 187, 875 | \$1,124, 834 |
| 1890-91 | 1,285, 200 | 408,913 | 1895-97 | 2,426,185 | 743,333 |
| 1891-92 | 1,567,082 | 394, 633 | 1897-98 | 2,565, 132 | ${ }_{517}^{417,866}$ |
| 1893-94 | 1, 9006,271 | 1,583,399 | 1899-1300 | 2,769,093 | 560, 896 718,507 |
| 1891-95. | 1,917,375 | 1,003,933 |  |  |  |

With two exceptions all the States and organized Territories have public normal schools. Nevada and Wyoming have no public normal schools, but their State universities have departments for the free education of teachers.

The number of students graduating from the normal courses of public and private normal schools in 1900 was 11,393. The normal graduates of other institutions were not reported to this office, but it may be estimated that the number of students graduating from the courses for the training of teachers in all the institutions, including the normal schools, was not less than 15,500.

The following table shows the number of institutions of each class and the number of normal students in each class for four scholastic years:

Normal students reported for four years.

| Classes of institutions. | 1896-97. |  | 189\%-98. |  | 1898-99. |  | 1899-1900. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Institutions. | Students. | Institutions. | Students. | Institu tions. | Sturdents. | Instituztions. | Students. |
| Public normal schools | 164 | 43,199 | 167 | 46, 215 | 166 | 44, 803 | $17 \%$ | 47, 421 |
| Private normal schools | 198 | 24, 181 | $1 \% 8$ | 21,293 | 165 | 23, 512 | 134 | 24, 172 |
| Public universities and colleges | 30 | 1,839 | 23 | 2,255 | 29 | 2,541 | 26 | 2,004 |
| Privateuniversities and colleges.. | 166 | 4,650 | 188 | 6,065 | 206 | 6, 050 | 221 | 7,520 |
| Public high schools ----.-...-. .-. | 507 | 9,001 | 494 | 7,378 | 544 | 8,930 | 506 | 10,703 |
| Private high schools | 422 | 7,064 | 326 | 5,989 | 378 | 6,886 | 417 | 8,522 |
| Grand total | 1,487 | 89,934 | 1,376 | 89,225 | 1,488 | 93, 687 | 1,476 | 98,342 |
| In all public institutions | 701 | 54,039 | 624 | 55, 878 | - 739 | 56,279 | 704 | 60,128 |
| In all private institutions | 786 | 35,895 | 69\% | 33, 347 | 749 | 37,408 | 772 | 38,214 |

The 172 public normal schools had an average of 276 students to the school, and the 134 private normal schools an average of 165 to the school. The 26 public universities and colleges reporting normal students had an average of 77 to the institution, while 221 private universities and colleges had an average of nearly 34. The average number of normal students in 500 public high schools was 21 and the average number in 417 private high schools 20 . These averages have reference only to students pursuing training courses for teachers. Students in other courses are enumerated elsewhere.

## PUBLIC NORMAL SCHOOLS.

The summarized statistics of the 172 public normal schools will be found in Tables 1 to 8, while detailed information concerning the schools will be found in Table 19.

The number of public normal schools in each State is shown in the first column of Table 1. Twelve States and Territories support only 1 school each. Massachusetts has 10 schools, New York 16, and Pennsyivania 15. These three States have nearly one-fourth the public normal schools in the United States and more than onethird of the normal students. In the 172 schools there were 2,171 teachers employed in instructing students in normal departinents and 744 engaged wholly in other departments. The North Atlantic Division had 915 of the teachers for normal students, the North Central Division 656, the two Southern divisions 200 and 202, and the Western Division 198. Of the 2,171 teachers, 935 are men and 1,236 are women.

Tables 2 and 3 summarize the enrollment of students in the public normal schools. Of the 47,421 students in the normal departments, there were 12,432 males and 34,989 females. The North Atlantic Division has 17,679 students, 14,679 of these being in Massachusetts, New York, and Pennsylvania. In the North Central Division the students in normal departments numbered 17,537, quite evenly distributed. The South Atlantic Division had 4,228, the South Central 4,092, and the Western Division 3,885. The public normal schools had 709
students in business courses, 2,955 in secondary grades equivalent to high school grades, and 20,408 pupils in elementary grades. The grand total, as shown in the first column of Table 3, was 71,491 . The number of colored normal strudents included was 2,707 , nearly all in the public normal schoois for educating colored teachers in the Southern States.

Many of the public normal schools use their elementary departments as model schoo!s, while some maintain no model schools of their own, but use for the same purpose the elementary grades in convenient public day schools.

Table 4 shows that in 1800 the number of teachers graduating from the public normal schools was 9,072 , the number of male graduates being 1,851 and the number of female graduates 7,221. The North Atlantic Division alone had more than half of these graduates, or 4,924 . The North Central Division had 2,033 graduates, the South Atlantic 687, the South Central 478 , and the Western Division 950. These schools had 193 graduates from business courses and 6 zal from other courses.

The income of the public normal schools for each State is shown in Table 5 . The appropriations from States, counties, and cities for support for the 144 schools reporting this item aggregated $\$ 2,760,003$. The total income for the year from appropriations, tuition fees, productive funds, and from other sources reported by 152 schools was $\$ 3,749,250$. Tuition fees received by 115 schools aggregated $\$ 549,933$, and the greater part of this sum must have been paid by students not in normal courses. The amount received from productive funds by 14 schools was $\$ 69,425$. It is probable that the $\$ 361,389$ reported by 47 schools as receipts from "other sources and melassified" came directly or indirectly from public funds.

The value of buildings, grounds, and other property of 148 of the public normal schools reporting to this office in 1899-1900 was $\$ 23,081,07 \%$. As shown in Table 6, the number of volumes reported in the libraries of 149 of these schools was 637,529 , valued at $\$ 784,995$. Eight schools received during the year benefactions amounting to $\$ 345,733$. Twelve schools have endowments aggregating $\$ 3,220,222$. The aggregate of public appropriations for buildings and improvements received by 60 schoo's was $\$ 718,507$.

Table '7 shows the amount of public appropriations received each year for the last six years by the public normal schools for support, while Table 8 shows the public appropriations for buildings and improvements in the same period.

## PRIVATE NORMAL SCHOOLS.

Table 9 shows that the 134 private normal schools had 917 teachers for normal students: The number of teachers wholly for other cepariments was 540 .

Private normal schools are not reported from 18 States and Territories. Only 7 such schools are credited to the North Atlantic Division, where there are 59 public normal schoo's. In the North Central Division there are 61 private normal schools with 16,488 normal students, while the 48 pabic normal schools of that division have 17,557 normal students. The two Southern divisions have together 64 private normal schoois with 4,609 normal students, while the 51 public normal schools of that section have 8,320 normal students.

From Table 10 it may be seen that 11,737 of the $22,1 \% 2$ nomal students in the private normal schools were men and 10,435 were wumen. Of the total number 16,488 , or about 74 per cent, are in the North Atlantic Division.

The total enrollment in the private normal schools was 45,193 , including 5,948 in business courses, 6,615 in secondary grades, and 10,458 in elementary grades.

It is shown in Tablo 11 that there were 2,250 colored students in the normal departments, nearly all being in private normal schools for the colored race in the two Southern divisions.

The number of graduates from teachers' training courses was 2,321, as shown in Table 12, the number of men being 1,154 and the number of women $1,16 \%$. There were $1,06 \pi$ graduates from business courses and 574 from other courses.

Table 13 shows that 20 private normal schools received State, county, or city aid aggregating $\$ 17,120$. The tuition fees of 80 schools amounted to $\$ 172,747$, while 13 schools received $\$ 34,138$ from productive funds. The aggregate income of 90 schools was $\$ 68,599$.

The value of grounds, buildings. and other property owned by 100 private normal schools was reported as $\$ 5,099,223$, and 24 schools possessed endowments to the value of $\$ 2,6 \% 6,456$, as shown in Table 14. During the year 16 schools received benefactions amounting to $\$ 487,789$. The libraries of 104 schools had 170,834 volumes, valned at $\$ 173,410$.

## DISTRIBUTION OF NORMAL STUDENTS.

It is shown in Table 15 that about 26 per cent of the normal students in public normal schools were men and nearly " 4 per cent were women, while in the private normal schools 53 per cent were men and 47 per cent women. Nearly 20 per cent of the normal students attending public normal schools in 1899-1900 graduated, while in the private normal schools less than 11 per cent graduated.

The number of students pursuing teachers' training courses in universities and colleges, in public high schools, and in private high schools and academies is summarized by States in Table 16. Table 17 is a summary of all the students in the five classes of institutions reported to this office as pursuing normal or teachers. training courses in 1899-1000.

Table 18 contains a list of the universities and colleges in which courses designed for the professional training of teachers are maintained. The number of normal students for each year for the past six years is given. Institutions which are public are so designated.

Table 1.-Summary of stutistics of public normal schools in 1893-1900.
SCHOOLS AND INSTRUCTORS.

| State or Territory. | $\begin{aligned} & \frac{6}{2} \\ & \text { 8 } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | Teachers for normal students. |  |  | Teachers wholly for other departments. |  |  | Total number teachers employed. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. | Male. | $\begin{gathered} \text { Fe- } \\ \text { male. } \end{gathered}$ | Total. | Irale. | Female. | Total. |
| United States. . | 1\%20 | 935 | 1,236 | 2,1\%1 | 133 | 011 | 744 | 1,068 | 1,84\% | 2,915 |
| North Atlantic Division.- | 59 | 336 | 579 | 915 | 8 | 233 | 241 | 341 | 812 | 1,156 |
| South Atlantic Division.- | 25 | $8 \frac{1}{2}$ | 116 | 200 | 44 | 112 | 156 | 128 | 228 | 356 |
| South Central Division... | 23 | 102 | 100 | 202 | 19 | 55 | 74 | 121 | 155 | 276 |
| North Central Division .- | 43 | 315 | 341 | 636 | 26 | 151 | 177 | $3 \leq 1$ | $49 \%$ | 833 |
| Western Division...-.-.-- | 19 | 98 | 100 | 198 | 36 | 60 | 96 | 134 | 160 | 294 |
| North Atlantic Division: <br> Maine | 6 | 9 | 99 | 38 | 1 | 4 | 5 | 10 | 33 | 43 |
| New Hampshire ------ | 1 | 3 | 5 | 8 | 1 | 5 | 6 | 4 | 10 | 11 |
| Vermont .-...-. | 3 | 6 | 9 | 15 | 0 | 0 | 0 | 6 | 9 | 15 |
| Massachusetts | 10 | 42 | 79 | 121 | 1 | 54 | 55 | 43 | 133 | 176 |
| Rhode Island....-.....- | 1 | 4 | 18 | 22 | 0 | 10 | 10 | 4 | 28 | 22 |
| Connecticut. | 4 | 14 | 57 | 71 | 0 | 18 | 18 | 11 | \% 7 | 89 |
| New York. | 13 | 89 | 203 | 292 | 1 | 67 | 68 | 90 | 270 | 360 |
| New Jersey .-.......... | 3 | 13 | 25 | 33 | 3 | 42 | 45 | 16 | 67 | 83 |
| Pennsylvania --.-.-.- | 15 | 150 | 151 | 310 | 1 | 33 | $3 \pm$ | 157 | 187 | 314 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |  |
| Delaware -------.--- | 1 | 0 | 2 | $\stackrel{\sim}{2}$ | 0 | 8 | 8 | 0 | 10 | 10 |
| Merryland .-....-... | 1 | 4 | 8 | 12 | 0 | 8 | 8 | 4 | 16 | 20 |
| District of Columbia.. | ${ }_{2}^{2}$ | 0 | 15 | 15 | 0 | 0 | 0 | ${ }^{0}$ | 15 | 15 |
| Virginia ---:- -----... | 3 | 10 | 23 | 3 | 27 | 42 | 69 | 37 | 64 | 101 |
| West Virginia --.-.-- | 7 | 34 | 20 | 54 | 8 | 8 | 16 | 42 | 28 | 70 |
| Nor'th Carolina . . . . . . | 6 | 14 | 6 | 20 | 6 | $2 \pi$ | 83 | 20 | 33 | 53 |
| South Carolina ....... | 1 | 8 | 21 | 32 | 0 | 0 | 0 | 8 | 24 | 32 |
| Georgia | 2 | 9 | 13 | 22 | 0 | 13 | 13 | 9 | 26 | 35 |
| Florida | 2 | 5 | 6 | 11 | 3 | 6 | 9 | 8 | 12 | 20 |
| South Contral Division: |  |  |  |  |  |  |  |  |  |  |
| Kentucky --.--...-...- | 4 | 8 | 6 | $1 i$ | 3 | 1 | 4 | $11 \sim$ | 7 | 18 |
| Tennessee. .-. --......- | 1 | 15 | 11 | 26 | 2 | 5 | 7 | 17 | 16 | 33 |
| Alabama .-.--------.- | 6 | 21 | 40 | 61 | 9 | $1 \frac{1}{2}$ | 23 | 30 | 54 | 84 |
| Mississippi | 6 | 10 | 4 | 14 | 3 | 15 | 18 | 13 | 19 | $3{ }^{3}$ |
| Louisiana. | 2 | 5 | 15 | 20 | 0 | 10 | 10 | 5 | 25 | 30 |
| Texas | 3 | 15 | $1 \%$ | 33 | 2 | 6 | 8 | $1 \%$ | 23 | 40 |
| Arkansas-------------- | 1 | 5 | 2 | \% | 0 | 0 | 0 | 5 | 2 | 7 |
| Oklahoma --......------ | 3 | 23 | 5 | 28 | 0 | 4 | 4 | 23 | 9 | 39 |
| Indian Territory |  |  |  |  |  |  |  |  |  |  |
| North Central Division: | 5 | 8 | 13 |  |  | 18 | 18 | 8 | $3 \pi$ | 45 |
| Indiana.------------------- | 2 | 30 | 10 | 40 | 0 | 18 | 18 | 80 | 10 | 40 |
| Illincis ....-.----. .-... | 4 | 54 | 58 | 112 | 4 | 1 | 5 | 58 | 59 | $11 \%$ |
| Michigan------------- | З | 32 | 39 | 11. | 0 | 31 | 31 | 33 | \%0 | 102 |
| Wisconsin | 8 | 60 | 70 | 130 | 0 | 27 | 27 | 60 | 97 | $15 \%$ |
| Minnesota | 5 | $\% 7$ | 36 | 63 | 0 | 22 | 22 | 27 | ¢\% | 83 |
| Iowa. | 5 | 33 | 28 | 61 | 0 | 5 | 5 | 33 | 33 | 66 |
| Missouri. | 4 | 29 | 30 | 59 | 22 | 35 | $5 \%$ | 51 | 65 | 115 |
| North Dakota | 2 | 9 | 6 | 15 | 0 | 5 | 5 | 9 | 11 | 20 |
| Sourth Dakota | 3 | \% | 19 | 86 | 0 | 3 | 3 | 7 | 22 | 29 |
| Nebraska -.----....-. | 1 | 9 | 7 | 19 | 0 | ${ }_{5}^{4}$ | 4 | $\stackrel{9}{\sim}$ | 11 | 20 |
| Kansas | 1 | 17 | 19 | 85 | 0 | 0 | 0 | $1 \%$ | 19 | 36 |
| Western Division: <br> Montana | 1 | 5 | 4 | 9 | 0 | 0 | 0 | 5 | 4 | 9 |
|  |  |  |  |  |  |  |  |  |  |  |
| Colorado | 1 | 9 | 9 | 18 | 0 | 0 | 0 | 9 | 9 | 18 |
| New Mexico. | 2 | 10 | 8 | 18 | 4 | 3 | $\gamma$ | 14 | 11. | 25 |
| Arizona - |  | 3 | 5 | 8 | 1 | 1 | 2 | 4 | 6 | 10 |
| Utala |  | 6 | 1 | 7 | 0 | 0 | 0 | 6 | 1 | 7 |
| Nevada. |  |  |  |  |  |  |  |  |  |  |
| Idaho. |  |  |  | 11 |  | 0 | 0 | 6 | 5 | 11 |
| Washington | 2 | 8 | 12 | 20 | 0 | 0 | 0 | 8 | 12 | 20 |
| Oregon | 4 | 20 | 10 | 30 | 31 | 43 | 74 | 51 | 33 | 104 |
| California . |  | 81 | 46 | 7 | 0 | 13 | 13 | 31 | 59 | 90 |

Table 2.-Summary of statistics of public normal schools in 1839-1900.
STUDENTS AND COURSES OF STUDY.

| State or Territory. | Students in normal department. |  |  | Students in business courses. |  |  | Other students in secondary grades. |  |  | Pupils in elementary grades. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\sim}{\stackrel{0}{\sim}}$ |  | W | $\stackrel{\dot{B}}{\stackrel{\text { Nu}}{\sim}}$ |  |  |  |  | $\begin{aligned} & \text { ※̈ } \\ & \text { O } \\ & \text { O } \end{aligned}$ | 呇 | 宊 | - |
| United States...-. | 12, 432 | 34, 989 | 47, 421 | 295 | 484 | \%09 | 1,019 | 1,906 | 2,955 | 9,382 | 11,024 | :20,406 |
| North Atlantic Division. | 3, 935 | 13,744 | 17,679 | 92 | 112 | 204 | 330 | 842 | 1,172 | 3, 615 | 4,355 | 7, 970 |
| South Atlantic Division. | 1,157 | 3,071 | 4,208 | 51 | 316 | 397 | 245 | 309 | 554 | ${ }^{7} 515$ | 9\%9 | 1,733 |
| South Central Division.- | 1,533 | 2,559 | 4,092 | 36 | 10 | 46 | 85 | 81 | 166 | 1,101 | 1,098 | 2,199 |
| North Central Division.- | 4, 963 | 12, 5174 | 17,537 | 25 | 5 | 30 | 271 | 5:27 | \%98 | 3, 306 | 3, 830 | 7,136 |
| Western Division.-... | 844 | 3,041 | 3,885 | 21 | 11 | 3: | 118 | $14 \%$ | 265 | 606 | 762 | 1,368 |
| North Atlantic Division: <br> Maine | 192 | 879 | 1,071 | $\bigcirc$ | 2 | 4 | 26 | 29 | 55 | 76 | 107 | 183 |
| New Hampshire | 1 | 117 | 118 | 0 | 0 | 0 | 38 | 49 | 87 | 82 | 98 | 180 |
| Vermont. | 27 | 285 | 252 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Massachusetts | 127 | 1,643 | 1,770 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 31 | 63 |
| Rhode Island | 0 | 194 | 194 | 0 | 0 | 0 | 0 | $3 \%$ | $3 \%$ | , | 0 | 0 |
| Connecticut. | 5 | 571 | 576 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New York | 1,034 | 4, 053 | 5,987 | 40 | 60 | 100 | 179 | 341 | $5: 8$ | 2, 202 | 2,671 | 4, 873 |
| New Jersey | 56 | 733 | 789 | 0 | 0 | 0 | 67 | 111 | 178 | 173 | 217 | 390 |
| Pennsylvania .-...... | 2,493 | 4,429 | 6,922 | 50 | 50 | 100 | 20 | 280 | 300 | 1,051 | 1,231 | 2,282 |
| South Atlantic Division: <br> Delaware | 0 | 25 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | , | 0 | 0 |
| Maryland ...-----.-. | 16 | 376 | 392 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 23 | 32 |
| District of Columbia. | 19 | 198 | 217 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Virginia. | 73 | 250 | 323 | 0 | 0 | 0 | 67 | 31 | 98 | 425 | 404 | 829 |
| West Virginia.....-. - | 619 | 615 | 1,934 | 51 | 75 | 126 | 130 | 146 | 276 | \%9 | 41 | 70 |
| North Carolina --.--- | 174 | 749 | 923 | 0 | 40 | 40 | 0 | , | 0 | 218 | 234 | $45 \%$ |
| Soutli Carolina | 0 | 202 | 202 | 0 | 151 | 151 | 0 | 0 | 0 | 44 | 106 | 150 |
| Georgia | 210 | 582 | 792 | 0 | 80 | 80 | 0 | 70 | 70 | 0 | 129 | 129 |
| Florida | 46 | 74 | 120 | 0 | 0 | 0 | 48 | 62 | 110 | 29 | 42 | 71 |
| South Cential Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky - .-. -- --........ | 136 210 | 189 394 | 310 604 | 1. | 0 | 2 0 | 15 | 20 | 35 0 | 193 | 98 | 291 |
| Alabama | $32 \%$ | 520 | 847 | 25 | - | 32 | 16 |  | 25 | 246 | 312 | 588 |
| Mississipp | 185 | 180 | 365 | 10 | 2 | 12 | 18 | 30 | 48 | 347 | 298 | 645 |
| Louisiana | 60 | 411 | 471 | 0 | 0 | 0 | 0 | 0 | 0 | 5:3 | 70 | 122 |
| Texas. | 313 | 466 | 779 | 0 | 0 | 0 | 34 | 20 | 54 | 48 | 52 | 100 |
| Arkansas .-.-. - .-. -- -- | 36 | 26 | 62 | 0 | 0 | 0 | 0 | , | 0 | 95 | 57 | 152 |
| Oklahoma--.... | 281 | 373 | 654 | 0 | 0 | 0 | 2 | 2 |  | 120 | 181 | 301 |
| Indian Territory-...- |  |  |  |  |  |  |  |  |  |  |  |  |
| North Central Division: Ohio - ---....-. | 13 | 562 | 575 | 0 | 0 | 0 | 43 | 50 | 93 | 0 | 0 | 0 |
| Indiana | . 508 | 819 | 1,22\% | 0 | 0 | 0 | 0 | 0 | 0 | , | 0 | 0 |
| Illinois. | $53 \%$ | 1,601 | 2,133 | 0 | 0 | 0 | 91 | 85 | $1 \% 6$ | 377 | 351 | \%23 |
| Michigan | 449 | 1,574 | 2,023 | 0 | 0 | 0 | 0 | 0 | 0 | 603 | 699 | 1,302 |
| Wisconsin | $7 \%$ | 2,011 | 2,786 | 0 | 0 | 0 | 12 | 42 | 51 | 746 | 990 | 1, 736 |
| Minnesota | 264 | 1,163 | 1,430 | 0 | 0 | 0 | 0 | 0 | 0 | 615 | 764 | 1, 379 |
| Towra | 600 | 1,604 | 2,204 | 25 | 5 | 30 | 85 | 82 | 16 | 503 | 433 | 936 |
| Missouri | \%83 | 1,114 | 1,897 | 0 | 0 | 0 | 0 | 0 | 0 | 129 | 100 | 299 |
| North Dakota | 131 | 286 | 417 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 45 | 85 |
| South Dakota | 141 | 339 | 480 | 0 | 0 | 0 | 2 | 18 | 30 | 137 | 183 | 320 |
| Nebraska | 207 | $55 \%$ | 764 | 0 | 0 | 0 | 0 | 0 | 0 | ${ }^{0}$ | 0 | ${ }^{0}$ |
| Kansas | 560 | 941 | 1,501 | 0 | 0 | 0 | 38 | 250 | 238 | 156 | 255 | 421 |
| Western Division: |  |  |  |  |  |  |  | 21 | 38 | 0 | 0 | 0 |
| Montana Wyoming | 13 | 8 | 98 | 0 | 0 | 0 | 17 | . 1 |  | 0 |  |  |
| Colorado | 10 | 275 | 377 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 102 | 169 |
| New Mexico | 39 | 34 | 133 | 21 | 11 | 32 | 50 | 50 | 100 | 35 | 29 | 64 |
| Arizona | 40 | 76 | 116 | 0 | 0 | 0 | 15 | 16 | 31 | 4 | 0 | 4 |
| Utah | 68 | Si | 148 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 30 | 52 |
| Nevada. |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho. | 88 | 155 | 243 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 20 | 47 |
| Washington | 68 | 201 | 319 | 0 | 0 | 0 | 4 | - | 11 | 18 | 0 | $\stackrel{0}{0}$ |
| Oregon | 170 | 361 | 531 | 0 | 0 | 0 | 25 | 20 | 45 | 186 | 236 | 422 |
| California---.---....- | 256 | 1,664 | 1,920 | 0 | 0 | 0 | 7 | 33 | 40 | 274 | 336 | 610 |

TABLE 3.-Summary of statistics of public normal schools in 1529-1200.
TOTAL ENROLIMENT OF STUDENTS.


TABLI 4.-Summary of statistics of public nommal schools in 1899-1900.
NUIMER OR NORMAL AND OTEER GRADUATES.

| State or Territory. | Normal graduates. |  |  | Graduates in business courses. |  |  | Graduates in other courses. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female | Total. | Male. | Female. | Total. | Male. | Female. | Total. |
| United States | 1, ¢51 | 7,201 | 9,072 | 91 | 102 | 193 | 179 | $4 \% 1$ | 650 |
| North Atlantic Division South Atlantic Division Soath Central Division.North Central Divisiou. Westeru Division | $\begin{aligned} & 867 \\ & 252 \\ & 153 \\ & 427 \\ & 422 \end{aligned}$ | $\begin{array}{r} 4,05 \% \\ 435 \\ 325 \\ 1,605 \\ 193 \end{array}$ | $\begin{array}{r} 4,924 \\ 687 \\ 478 \\ 2,033 \\ 9.050 \end{array}$ | $\begin{array}{r} 16 \\ 30 \\ 8 \\ 11 \\ 26 \end{array}$ | $\begin{array}{r} 16 \\ 48 \\ 3 \\ 7 \\ 28 \end{array}$ | $\begin{aligned} & 32 \\ & 78 \\ & 11 \\ & 18 \\ & 54 \end{aligned}$ | $\begin{array}{r} 24 \\ 41 \\ 31 \\ 82 \\ 1 \end{array}$ | $\begin{array}{r} 295 \\ 35 \\ 53 \\ 158 \\ 0 \end{array}$ | $\begin{array}{r}249 \\ 76 \\ 84 \\ 240 \\ \hline 1\end{array}$ |
| North Atlantic Division: <br> Maine. <br> New Hampshire <br> Vermont <br> Massachusetis. <br> Rhode Island $\qquad$ <br> Connecticut. $\qquad$ <br> New York <br> New Jersey - $\qquad$ <br> Pennsylvania | 66 1 7 33 0 0 207 14 143 | 293 897 90 517 37 186 1,553 207 1,177 | 289 38 97 580 37 186 1,760 281 1,716 | 0 0 0 0 0 0 3 0 13 | 0 0 0 0 0 0 3 0 13 | 0 0 0 0 0 0 6 0 26 | 4 0 0 0 0 6 7 7 | 0 11 0 0 0 0 169 23 23 | 15 0 0 0 0 175 29 30 |
| Sozth Atlantic Division: <br> Delaware <br> Maryland <br> District of Columbia <br> Virginia <br> West Virginia <br> North Carolina <br> South Carolina $\qquad$ <br> Georgia $\qquad$ | 0 6 8 17 131 38 0 | 15 98 90 53 78 58 51 31 16 2 | 15 98 98 70 259 96 31 16 4 | 0 0 0 0 30 0 0 0 0 | 0 0 0 0 20 0 20 8 0 | 0 0 0 0 50 0 20 8 0 | 0 0 0 36 5 0 0 0 | 0 0 0 13 3 0 11 4 1 | 0 49 8 0 14 |
| South Central Division: Kentucky <br> Temnesseo | 49 | \% | 121 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alabama <br> Mississippi <br> Louisiana $\qquad$ <br> Texas $\qquad$ <br> Arkansas <br> Oklahoma. $\qquad$ <br> Indian Territory | 39 10 6 36 0 13 | 73 11 80 81 0 19 | 111 21 86 108 0 83 | 7 1 0 0 0 0 | 3 0 0 0 0 0 0 | 10 1 0 0 0 0 | 18 6 0 0 7 0 | 15 4 3 2 0 3 0 | 63 9 2 0 19 0 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohio.............. | 0 | 278 | 281 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indiana .-....... | $4{ }_{4}^{0}$ | 18 60 | 18 10.2 | 0 0 | 0 0 | 0 0 | 0 0 | 0 |  |
| Michigan | 43 | 129 | 171 | 0 | 0 | 0 | 0 | 0 |  |
| Wisconsin | 150 | 386 | 538 | 0 | 0 | 0 | 25 | 80 | 105 |
| Minnesota | 43 | 332 | 375 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iowa | 62 | 128 | 190 | 0 | 0 | 0 | 4 | 3 |  |
| Missouri | 26 | 115 | 141 | 11 | 7 | 18 | 52 | 3 | 120 |
| North Dakota | 9 | 21 | 30 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Dalsota Nebraska | 8 | 42 14 | 51 | 0 0 | 0 0 | 0 0 | 0 | ${ }_{2}^{0}$ | 0 |
| Kansas..- | 28 | 83 | 111 | 0 | 0 | 0 | 0 | 0 | 0 |
| Western Division: Montana....... | 0 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wyoming-. <br> Colorado | 11 |  |  | 0 | 0 | 0 | 0 | O |  |
| V-w Mexico | 1 | 35 | 44 | 1 | 5 | 6 | 1 | 0 |  |
| Arizoza... <br> Utah | 0 | 0 | 0 | 0 | 0 | 0 | , | 0 | 0 |
| Nevada |  |  |  |  |  |  |  |  |  |
| Idano. | 9 | 23 | 32 | 0 | 0 | 0 | 0 | 8 | 0 |
| Washington | 7 | 24 | 31 | 0 | 0 | 0 | 0 | 0 | 0 |
| California. | 72 | 554 | 626 | - | 0 | 0 | 0 | 0 | 0 |

Table 5.-Summary of statistics of public normal schools in 1892-1900.
INCOME FROM VARIOUS SOURCES.

| Stéte or Territory. |  | Appropriated by States, counties, or cities for support for 1899-1900. |  | Received from tuiticn and other fees. |  | Receited from productive funds. |  | Received from other sources and un- classi- fled. |  | $\begin{aligned} & \text { Total in- } \\ & \text { come for } \\ & \text { the year } \\ & 1899-1909 . \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United State | 141 | \$2, 769, 003 | 115 | \$5449,933 | 11. | \$69, 425 | 47 | 3361,389 | 15.2 | 83, 749,750 |
| Nortll Atlantic Division. South Atlantic Division. South Central Division. North Central Division. Western Division. | $\begin{aligned} & 48 \\ & 19 \\ & 22 \\ & 37 \\ & 18 \end{aligned}$ | $\begin{array}{r} 1,147,471 \\ 830,883 \\ 154,638 \\ 934,731 \\ 301,280 \end{array}$ | $\begin{aligned} & 34 \\ & 14 \\ & 17 \\ & 35 \\ & 15 \end{aligned}$ | $\begin{array}{r} 345,273 \\ 35,461 \\ 37,228 \\ 114,389 \\ 17,582 \end{array}$ | $\begin{aligned} & 3 \\ & 4 \\ & 5 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{array}{r} 700 \\ 36,108 \\ 7,199 \\ 25,415 \\ 0 \end{array}$ | $\begin{array}{r} 11 \\ 11 \\ 1: \\ 9 \\ 4 . \end{array}$ | $\begin{array}{r\|} \hline 111,454 \\ 146,793 \\ 91,196 \\ 9,827 \\ 2,114 \end{array}$ | $\begin{aligned} & 49 \\ & 21 \\ & 21 \\ & 20 \\ & 41 \\ & 19 \end{aligned}$ | $\begin{array}{r} 1,604,898 \\ 44,250 \\ 290,261 \\ 1,084,365 \\ 320,976 \end{array}$ |
| North Atlantic Division: <br> Maine $\qquad$ <br> New Hampshire $\qquad$ <br> Vermont <br> Massachusetts $\qquad$ <br> Rhode Island <br> Connecticut. $\qquad$ $\qquad$ <br> New York <br> New Jersey. <br> Pennsylvania | 6 1 3 6 1 1 16 1 13 | 32,750 13,800 15,500 179,862 60,000 15,234 596,780 45,700 188,545 | $\begin{gathered} 1 \\ 2 \\ 1 \\ 1 \\ \hdashline-11 \\ \hdashline 11 \\ 12 \end{gathered}$ |  | 1 | 200 <br> 500 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 | 2 | 500 $\cdots-120$ 0 $\cdots-\cdots$ 0 562 0 $110,2 \% 2$ | 6 1 3 6 1 1 16 1 14 | 36,229 14.800 16,335 179,922 60,000 15,234 621,789 71,000 589,589 |
| South Atlantic Division: <br> Delatvare <br> Maryland <br> District of Columbia | 1 | $\begin{array}{r}18,515 \\ \hline 0,090\end{array}$ | - | - |  | --- 0 |  | ---..... | 14 | - |
| Virginia <br> West Virginia <br> North Carolina <br> South Carolina <br> Georgia <br> Florida | $\begin{aligned} & 2 \\ & 6 \\ & 5 \\ & 1 \\ & 2 \\ & 2 \end{aligned}$ | 30,000 66,300 33,075 31,508 36,500 13,500 | $\begin{aligned} & 6 \\ & 6 \\ & 1 \\ & 1 \\ & 1 \\ & 2 \end{aligned}$ | 1,603 3,973 10,464 7,714 4,260 436 436 | 1 | , 008 <br> 0 <br> $\cdots-$. <br> 0 <br> 100 | $\begin{aligned} & 1 \\ & 2 \\ & 2 \\ & 1 \\ & 2 \\ & 2 \end{aligned}$ | $\begin{array}{r} 124,818 \\ 1,450 \\ 4,600 \\ 2,200 \\ 2,500 \\ 12,535 \end{array}$ | 3 <br> 7 <br> 5 <br> 5 <br> 1 <br> 2 <br> 2 | 192,429 70,418 48,189 41,429 43,200 26,571 |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |
| Tennesse | 1 |  | 1 |  | , |  |  |  |  | \% |
| Alabama | 6 | 23,550 | 5 | 8,838 |  | , | 3 | 14, 650 | ${ }_{6}$ | ,138 |
| Mississipp | 6 | 4, 760 | 4 | 1,96\% |  | ${ }^{0}$ | 1 | 1225 | , | 6,952 |
| Louisiana | $\frac{1}{3}$ | 18,000 | 1 | \%,305 | 1 | 1,28y | 1 | 1,950 | 1 | 21, 314 |
| Arkansa | $\bigcirc$ | 3,500 | 1 |  | 0 |  | . | 6,850 | 1 | 10, 820 |
| Oklahoma | $\stackrel{2}{2}$ | 89,428 | 1 | 150 | 1 | 5,000 | 1 | 17, 500 | 2 | 52,078 |
| Indian Territory |  |  |  |  |  |  |  |  |  |  |
| Ohio - | 3 | 29, 010 | 4 | 1,640 |  | 0 |  | 0 | 5 | 30,640 |
| Indiana |  | 65,000 |  | 5,060 |  | 0 |  | 0 |  | \%0,000 |
| Illinois. | 4 | 139,215 | 3 | 10,490 | 1 | 6, 983 | 1 |  |  | 156, 697 |
| Michigan | 3 | 117, 000 | ${ }_{2}^{2}$ | 12, 600 | 1 | 4,200 | 2 | 1,409 | 8 | 135, 200 |
| Wisconsin | 8 | 236,415 | $\stackrel{6}{5}$ | 17,672 |  | 0 | $\stackrel{2}{2}$ | 4, 176 | 8 | 288, 263 |
| Minnesota | 4 | 106, 500 | 5 | 11, 19 |  | 0 | 3 | 2,343 | 5 | 120, 562 |
| Missouri | 3 | 43,250 | 3 | 19,885 |  |  |  | 1,500 | ${ }_{3}$ | 63, 135 |
| North Dak | 2 | 23, 450 | 2 | 2,60\% |  | 0 |  | 0 | 2 | 26, 257 |
| South Dako Nebraska | 3 | 30, 150 | 3 | 6,052 | 2 | 1,235 | 1 | 400 | 3 | 37, 837 |
| Nebraska | 1 | 27,500 |  |  |  |  |  |  | 1 | 27,500 |
| Western Division | 1 |  | 1 | 3,150 | 1 | 13,000 |  |  |  |  |
| Montana. W roming | 1 | 13, 000 | 1 | \%00 |  | 0 |  | 0 | 1 | 15, \%00 |
| Colorado | 1 | 35,0\%0 | 1 | 2,009 |  |  | 1 | 400 | 1 | 37,400 |
| New Mexi | , | 7,000 | $\stackrel{\square}{2}$ | 1,885 |  | 0 |  | - | 2 | 8,885 |
| Arizona | 1 | 15,000 7,500 | $\frac{2}{1}$ | 1, 303 |  | 0 |  | 80 |  | 16,303 8,450 |
| Nevad |  |  |  |  |  |  |  |  |  |  |
| Idaho- | 2 | 14,500 | 1 | 3 |  | 0 |  | 0 |  | 14,503 |
| Washing | 2 | 15, 100 | 1 | 800 |  | 0 |  | 0 | 2 | 15, 900 |
| Oregon ${ }_{\text {California }}$ | 4 | 24, 500 | 4 | 8,240 |  | 0 |  |  |  | 32. 740 |
| California | 4 | 16\%, 680 | 2 | 1,711 | -- | 0 | 2 | 1,694 | 4 | 1\%1,085 |

Table 6.-Summary of statistics of public normal schools in 1899-1900.
VALUE OF BUILDINGS AND OTHER PROPERTY.

| State or Territory. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States. | 149 | 637,529 | 3731, 995 | 148 | \$ $23,061,0 \% 7$ | 8 | \$345, 733 | 12 | 33, 220,222 | 60 | \$718,507 |
| N. Atlantic Division. | 55 | 233 | 267,4 | 50 | 12, 172, | 1 | 50 |  | 922, 700 |  | 39 |
| S. Atlantic Division. | 18 | 47, 193 | 48,200 | 19 | 2,419,744 | 1 | 254, 233 | 1 | 1,657,372 | 8 | 101,254 |
| S. Central Division.. | 18 | 42, 654 | 59, 885 | 20 | 801,087 | \% | 3,600 | 1 | 6,000 | 9 | 36,570 |
| N. Central Division - | 41 | 268,429 | 311,655 | 33 | 6, 314,105 |  | 11,000 | 2 | 36, 000 | 14 | 251,094 |
| Western Division... | 19 | 45,780 | 47,925 | 18 | 1,333,526 | 2 | 26,800 |  | 598,150 | 10 | 118,950 |
| N. Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |
| New | 1 | 8,090 | 1,010 | 1 | 125,000 |  |  |  |  | 1 |  |
| Vermont | 3 | 9,966 | 9,250 |  | 20,090 |  |  | 1 |  | 2 | 1,760 |
| Massachusett | 8 | 35, 906 | 35,354 | 7 | 1,725, 7200 |  |  | 1 | 302, 700 | 4 | 93,563 |
| Rhode Island | 1 | 2,000 | 3,000 |  | 750, 000 |  |  |  |  |  |  |
| Connecticut | 4 | 30,293 | 36,000 | 2 | 229, 222 |  |  |  |  |  |  |
| New York. | 15 | 69,359 | 81, 250 | 14 | 4,206,459 | 1 | 50,000 |  |  | 5 | 70,216 |
| New Jersey | 2 | -4,190 | 5,200 | $\stackrel{2}{2}$ | 485, 000 |  |  |  |  |  | 5,000 |
| S. Atlantic Division: |  | 70,603 | 89,701 | 15 | 4, 409,044 |  |  | 2 | 710,000. | 3 | 26,500 |
| S. Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |
| Maryland | 1 | 4,200 | 6,000 | 1 | 160,000 |  |  |  |  | 1 | 4,504 |
| Dist of Columbia | 1 | 745 | 500 | 1 | 1,200 |  |  |  |  |  |  |
| Virginia. | ${ }_{7}$ | 15,035 | 8,000 | 3 | 389,0 0 | 1 | 254,333 | 1 | 1,657,072 | 1 | 20,000 |
| West Virgini | 7 | 16, 660 | 22,500 |  | 575,500 |  |  |  |  |  | 35, 800 |
| North Carolina- | 1 | 3, 075 | 2,200 | $\stackrel{2}{1}$ | 103, 000 |  |  |  |  | 1 | 5.000 |
| South Carolina | 1 | 4,500 | 6,090 | 1 | 304, 000 |  |  |  |  |  | 35,000 |
| Georgia | 1 | 2,000 | 2,000 |  | 245,000 |  |  |  |  |  | 950 |
| $\begin{aligned} & \text { Florida- } \\ & \text { Central Div } \end{aligned}$ | 2 | 1,078 | 1,000 | 2 | 42,044 |  |  |  |  |  |  |
| Kentucky | 2 | 1,000 | 1,750 | 2 | 29,000 |  |  |  |  |  |  |
| Tennessec | 1 | 12, 100 | 12,000 | 1 | 150, 010 |  |  | 1 | 6,000 |  |  |
| Alabama | 4 | 4,783 | 4, 500 | 4 | 105, 000 | 1 | 1,660 |  |  | 1 | 1,800 |
| Mississippi | 3 | 3,800 | 6,333 | ${ }^{6}$ | 19,309 |  |  |  |  |  | 345 |
| Lexas | $\stackrel{2}{3}$ | 3,801 | 4, 800 | 1 | 75, 000 | 1 |  |  |  | 1 | 1,500 |
| Arkansas | 1 | 4,150 | 4,000 | 1 | 80,50\% |  |  |  |  | 1 | 600 |
| Oklahoma |  |  |  | 2 | 139,000 |  |  |  |  | 1 | 10,000 |
| Indian Territory |  |  |  |  |  |  |  |  |  |  |  |
| Ohio - | 5 | 1,970 | 2,209 | 1 | 76,009 |  |  | 1 | 35, 000 |  |  |
| Indiana | 1 | 30,000 | 45, 000 | 1 | 350, 000 |  |  |  | - 0 |  |  |
| Illinois, | 4 | 49, 106 | 68,590 | 4 | 2,151,000 | 1 | 10,000 |  |  | 2 | 55,390 |
| Michigan | 3 | 27, 577 | 30,600 | $\stackrel{3}{3}$ | 457,265 |  |  |  |  | $\stackrel{2}{2}$ | 58, 000 |
| Wisconsiir | 8 | 66,560 | 53, 390 |  | 797, 000 |  |  |  |  |  | 2,904 |
| Minnesot | 5 | 19,205 | 17,230 |  | 774, 009 |  |  |  |  |  | 5,800 |
| $\begin{aligned} & \text { Iowa ... } \\ & \text { Missouri } \end{aligned}$ | 5 | 11,211 | 15,625 | 4 | 174, 880 |  |  |  |  |  | 50,000 1,000 |
| Missouri... <br> North Dako | $\stackrel{3}{2}$ | 14,900 3,800 | 13,500 3,250 | $\stackrel{4}{2}$ | 881, 6300 | 1 | 1,000 | 1 | 1,000 |  | 1,000 |
| South Dak | 3 | 17,500 | 10,300 | 3 | 187, 600 |  |  |  |  | 2 | 52,00 |
| Nebraska | 1 | 13,600 | \%, 000 | 1 | 200, 000 |  |  |  |  | 1 | 5,000 |
| Western Division. | 1 | 14,500 | 22, 000 | 1 | 200, 000 |  |  |  |  | 1 | 20,500 |
| Western Division: Montana | 1 | 2,800 | 3, 000 | 1 | 60,000 | 1 | 15, 700 | 1 | 63,000 |  |  |
| Wyomin |  |  |  |  |  |  |  |  |  |  |  |
| Colorado | 1 | 1,500 | 1, 500 | 1 | 200, 000 |  |  |  |  |  |  |
| New Me Arizona | $\because$ | 3,000 2 | 3,500 1,150 | ${ }_{2}^{1}$ | 90,600 115,009 | 1 |  |  |  | 1 | 19, 7000 |
| Utah | 1 | 1,010 | 2,000 | $\underline{1}$ | 13, 000 |  |  |  |  |  |  |
| Nevad |  |  |  |  |  |  |  |  |  |  |  |
| Idaho |  | 2,450 | 2,950 | 2 | 68,009 |  |  | 1 | 500,000 | 1 | 6,000 |
| Washing | 2 | 5,000 | 4,500 | $\stackrel{2}{4}$ | 110,009 |  |  |  |  |  |  |
| Oregon California | 4 | 1,115 | r 81,350 | 4 4 | 78,009 $599,0: 6$ |  |  | 1 | $\begin{array}{r} 30,0,000 \\ 5,150 \end{array}$ | 3 3 3 | $\begin{aligned} & 13,750 \\ & 66,500 \end{aligned}$ |
|  |  |  |  |  | ¢\%, |  |  |  |  |  |  |

TABEE 7.-Review of public normal school statistics, 1894-1900.
APPROPRIATION FROM STATE, COUNTY, OR CITY FOR SUPPORT.

| State or Territory. | 1834 9.5. | 1895-96. | 1896-97. | 189\%-98. | 1898-99. | 1899-1900. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | \$1,917,3\%5 | 32, 187, 875 | $82,426,185$ | §2, 556, 132 | $92,510,934$ | \$2, 769, 003 |
| North Atlantic Division | 773, 035 | 887, 590 | 1,005, 972 | 1,035, 502 | 1,010,913 | 1, 147, 471 |
| South Atlantic Division | 141,017 | 146, 592 | 257, 835 | 270, 3\%8 | 280, 350 | 230, 883 |
| South Central Division | 113,480 | 106, 043 | 75,940 | 181,165 | 132, 715 | 154, 638 |
| North Central Division | 668,063 | 769, 300 | 852, 787 | 881, 437 | 779, 256 | 934, 731 |
| Western Division.-.-- | 221,800 | 27\%,750 | 233, 650 | 297, 700 | 307,700 | 301,280 |
| North Atlantic Division: Maine | 25, 600 | 27,350 | 26.900 | 26.900 | 1,020 | 250 |
| New Hampshire..- | 12,000 | 10,000 | 13,000 | 13,000 | 13,000 | 13, 800 |
| Verment.-..-- | 7,264 | 13, 032 | 12, 426 | 15,000 | 17,000 | 15,500 |
| Massachusetts | 78, 397 | 138, 594 | 168,207 | 175, 878 | 196, 668 | 179,862 |
| Rhodo Island | 18,000 |  | 20,000 | 25,000 | 55, 000 | 60,060 |
| Connecticut | 72,000 | 39,000 | 42, 685 | 16,090 | 3t, 303 | 15,234 |
| New York. | 360, 111 | 414, 954 | 484, 801 | 517, 105 | 513,507 | 596,780 |
| Now Jersey | 40,570 | 40,570 | 41,943 | 55, 661 | 45, 000 | 45, 000 |
| Pennsylvania. | 159, 093 | 174,390 | 193, 060 | 190,958 | 105,415 | 188,545 |
| South Atlantic Division: |  |  |  |  |  |  |
| Delaware. | 9,100 | 9,042 |  |  |  |  |
| Maryland ---.-.-. | 10, 200 | 10,500 | 12, 500 | 12,875 | 20,000 | 20,000 |
| District of Columbia |  |  |  |  |  |  |
| Virginia | 30,200 | 31,000 | 38,333 | 47,996 | 30,000 | 30,000 |
| West Virginia | 28,26\% | 35,100 | 42,209 | 36, 100 | 122,550 | 66,300 |
| North Carolina | 19,800 | 20,750 | 41,316 | 37, 657 | 32, 800 | 33,075 |
| South Carolina | 5,250 |  | 62,229 | 30,000 | 30,000 | 31, 508 |
| Georgia | 32,900 | 33, 960 | 45, 400 | 45, 400 | 36, 500 | 36, 500 |
| Florida -----.-.-. | 5,000 | 7,300 | 15, 858 | 10,000 | 8,500 | 13,500 |
| South Central Division: Kentucky | 9,200 | 10, 350 | 5,775 | 3, 375 | 4,325 | 3,700 |
| Tennessee | 15,090 | 20,225 | 5,76 | 20,000 | 20,000 | 20,000 |
| Alabama | 18,525 | 22,418 | 29,450 | 22, 445 | 21,800 | 23,550 |
| Mississippi | 8, 425 | 6,330 | 6,615 | 6, 820 | 6,890 | 4,760 |
| Louisiana | 13, 20 | 13,750 | 15, 000 | 125, 000 | 16,000 | 16, 000 |
| Texas | 40,500 | -3, 000 | 1,600 | 42, 500 | 42,700 | 53, 700 |
| Arkansas | 8,050 | 4,950 | 5,500 | 5,025 | 5,000 | 3, 500 |
| Oklahoma |  |  | 12,000 | 16,000 | 16,000 | 29,428 |
| Indian Territory ... |  |  |  |  |  |  |
| North Central Division: |  |  |  |  |  |  |
| Ohio -.. | 5,000 | 1,800 | 3,500 | 8,000 | 4,000 | 29, 000 |
| Indiana | 40, 000 | 65, 827 | 60, 720 | 60,759 | 65,352 | 65, 000 |
| Illinois | 56,500 | 123,610 | 64,000 | 197,77\% | 96,060 | 139,216 |
| Michigan | 58, 450 | 61, 400 | 63,850 | 95, 650 | 88, 700 | 117,000 |
| Wisconsin | 155, 271 | 185, 086 | 288,540 | 259,396 | 198,717 | 266, 415 |
| Minnesot | 88, 000 | 91,500 | 95, 000 | 123,000 | 125, 000 | 106,500 |
| Iowa. | 38, 5\%5 | 39,075 | 42,625 | 51,737 | 55, 887 | 52,050 |
| Missouri | 142,317 | 142,352 | 143, 55.2 | 49,950 | 39,750 | 43,250 |
| North Dakota | 22,000 | 19,000 | 20, 000 | 20,227 | 23, 300 | 23, 650 |
| South Dakota | 23, 090 | 12, 500 | 26,000 | 27,000 | 28, 500 | 30, 150 |
| Nebraska | 30, 000 | 19,500 | 25, 000 | 24, 650 | 25,000 | 27,500 |
| Kansas | 6,000 | 2S,250 | 20,000 | 28,000 | 2S,950 | 35,000 |
| Western Division: <br> Montana |  |  |  | 7, 700 | 15,000 | 15, 000 |
| Wyoming |  |  |  |  |  |  |
| Colorado | 35, 000 | 25,000 | 35,000 | 35,000 | 35, 000 | 35,000 |
| New Mexico | 0 | 7,000 | 6,00? | 6,500 |  | 7,000 |
| Arizona | U | 6,000 | 8,000 | 11,509 |  | 15,000 |
| Utah |  |  |  | 58,500 | 7,500 | 7,500 |
| Nevada |  |  |  |  |  |  |
| Idaho | 7,600 | 50,509 | 17,000 | 14,000 | 14,000 | 14, 500 |
| Washington | 39,000 | 42, 000 | 23,500 | 12,500 | 29,200 | 15,100 |
| Oregon | 23,200 | 16,020 | 15, 650 | 9,700 | 20,500 | 21,500 |
| Cailifornia | 117,000 | 121,250 | 125, 500 | 142, 300 | 180,500 | 16\%,680 |

Table 8.-Review of mublic nomal school statistics, 1894-1900.
PUBLIC APPROPRIATIONS FOR BUILDINGS AND IMPROVEMENTS.

| State or Territory. | 1594-95. | 1895-96. | 1896-9\%. | 189\%-98. | 1898-99. | 1899-1900. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | \$1, 003, 933 | \$1, 124, 834 | 8743, 333 | \$417, 866 | \$550, 896 | 8718,507 |
| North Atlancic Division | 449, 959 | 564, 113 | 146. 014 | 131,217 | 113. 659 | 210,639 |
| South Atlantic Division. | 100,309 | 83, 168 | 263, 045 | 57, 433 | 58, $7 \%$ | 101, 254 |
| South Central Division | 11,200 | 9,798 | 15, 250 | 4,310 | 5,2\%5 | 36,5\%0 |
| North Central Division | 320, 165 | 288,250 | 203, 6:9 | 97, 504 | 133, 375 | 251,094 |
| Western Division.....- | 122, 300 | 179,500 | 115, $3: 5$ | 127, 400 | 249,812 | 118,950 |
| North Atlantic Division: <br> Maine | 39, ¢¢0 | 17.000 | 68,000 | 41,000 | 740 | 5,600 |
| New Hampshire |  |  | 715 | 715 | 8,000 | 8,000 |
| Vermont...... |  | 0 |  | 0 |  | 1,760 |
| Massachusetts |  | 1\%5, 020 | 10,000 | 0 | 53, 300 | 93, 563 |
| Rhode Island | 0 | 250, 0.00 | 0 | 0 |  |  |
| Connecticut | 210, 000 | 20,000 | 0 |  |  |  |
| New York. | 60, 142 | 140,869 | 16,895 | 55, 587 | 18,732 | 70,216 |
| New Jersey | 10,603 | 1,249 | 330 | 4,515 | 4,000 | 5, 000 |
| Peunsylvania | 100,124 | 10, 000 | ร้0,104 | 29,400 | 28,887 | 26,500 |
| South Atlantic Division: <br> Delawave |  | 5,912 |  |  |  |  |
| Maryland | 43, 726 | 1,631 | 0 | 2,760 | 0 | 4,504 |
| District of Columbia | 0 |  |  |  |  |  |
| Virginia_ |  | 5, 120 | 166, 405 | 2,500 |  | 20,000 |
| West Virginia | 42,060 | 55, 600 | 61, 400 | 45, 450 | 53,319 | 35, 800 |
| North Carolina | 5,033 |  | 190 |  | 5, 000 | 5,000 |
| South Carolina |  |  | 50 | 1,7\% |  | 35, 000 |
| Georgia | 1.000 | 7.000 | 35,000 |  | 456 | 650 |
| Florida - | 8,500 | 8,500 | 0 | 5,000 |  |  |
| South Central Division: Kentucky |  |  |  | 800 | 800 |  |
| Kentucky <br> Temnessee. |  | 0 | 2, 600 | 800 | 800 |  |
| Alabama | 500 | 3, 002 | 50 | 1, 000 | 1,800 | 1,800 |
| Mississippi |  | 0 | 20 | 110 | 75 | 345 |
| Iouisiana. | 7,500 |  | 12.480 |  |  | 1,500 |
| Texas | 3,000 | 2,500 | 0 | 2,0c0 | 2,000 | 22,325 |
| Arkansas | 200 | 1,296 | 0 | 460 | 600 | ${ }^{6} 600$ |
| Oklahoma. |  | 3, 000 | 0 |  |  | 10,000 |
| Indian Territory |  |  |  |  |  |  |
| Norcly Central Division: |  |  |  |  |  |  |
| Olio |  | 1,000 | 3,000 | 2,300 |  |  |
| Indiana | 20,000 | ~ 0 | 16,000 | 50 |  | (10) |
| Ilinois. | 40,000 | $4{ }^{\prime \prime}, 000$ | 56, 000 |  | 90,875 | 55, 390 |
| Michigan. | 20,000 |  | 25,000 | 17,500 | 0 | 58, 000 |
| Wisconsin | 12,733 | 155, 800 | 55, 889 | 39,354 |  | 2,904 |
| Minnesota | 54,500 | 11, 750 | 12,560 | 15,000 | 10,000 | 5,800 |
| Iowa....- | 36, 000 | 30,000 | 3,000 |  |  | 50,000 |
| Missouri | 131,929 | 35, 400 | 6,280 | 3,000 | 1,000 | 1,000 |
| North Dakota. |  |  | 0 | 300 | 2,000 |  |
| South Dakota |  |  | 0 |  | 25,000 | 52,500 |
| Nebraska | 5, 000 | 3,000 | 20,000 | 20,000 | 5,000 | 5,000 |
| Wensas --...... |  | 4,300 | 12,000 |  |  | 20,500 |
| Western Division: Montana --.... |  |  |  | 50,000 |  |  |
| Wyoming |  |  |  |  |  |  |
| Colorado | 10, 000 | 20,000 |  | 0 |  |  |
| New Mexic |  | 10,000 | 10,000 |  | 5,000 | 19,700 |
| Arizona | 1,300 | 11,500 | 35,000 | 16,000 |  | 13,000 |
| Utah |  |  |  | 58,560 | 23, 000 |  |
| Nevada |  |  |  |  |  |  |
| Tdaho | 25, 000 | \%0, 00 | 1,000 | 50 |  | 6,000 |
| Washington | 6,060 | 60, 000 | 62,825 | 2,850 | 6,500 |  |
| Oregon |  | 3, 000 | 4, 000 |  | 17,500 | 13, 750 |
| Callifornia | 80, 000 | 5,000 | 2,500 | 0 | 197, 812 | 66,500 |

Table 9 -Summary of statistics of private normal schools in 1899-1900.
SCHOOLS AND INSTRUCNORS.

| State or Territory. |  | Teachers for normal students. |  |  | Teachers wholly for other departments. |  |  | Total number teachers employed. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | $\begin{gathered} \text { Fe- } \\ \text { male } \end{gathered}$ | Total. | Male. | Female. | Total. | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male } \end{gathered}$ | Total. |
| United States | 131 | 535 | 38.2 | 917 | 257 | 283 | 540 | 792 | 665 | 1,45i |
| North Atlantic Division. South Atlantic Division. South Central Division North Central Division Western Division | $\begin{array}{r} 7 \\ 29 \\ 25 \\ 61 \\ 2 \\ 2 \end{array}$ | $\begin{array}{r} 54 \\ 43 \\ 90 \\ 345 \\ 3 \end{array}$ | $\begin{array}{r} 68 \\ 6815 \\ 91 \\ 155 \\ 15 \\ \hline \end{array}$ | $\begin{gathered} 122 \\ 108 \\ 181 \\ 500 \\ 6 \end{gathered}$ | $\begin{array}{r}10 \\ 33 \\ 97 \\ 115 \\ \hline 2\end{array}$ | $\begin{array}{r} 15 \\ 79 \\ 105 \\ 79 \\ 4 \end{array}$ | $\begin{array}{r} 25 \\ 112 \\ 203 \\ 194 \\ 6 \end{array}$ | $\begin{array}{r} 64 \\ 76 \\ 747 \\ 460 \\ 5 \end{array}$ | $\begin{array}{r}83 \\ 144 \\ 197 \\ 234 \\ 7 \\ \hline\end{array}$ | $\begin{array}{r}14 \% \\ 220 \\ 384 \\ 694 \\ 18 \\ \hline\end{array}$ |
| North Atiantic Division: <br> Maine <br> New Hampshire ....... |  |  |  |  |  |  |  |  |  |  |
| Vermont. <br> Massachnsetts Rhode Island. | 3 | 7 | 21 | 28 | 0 | 9 | 9 | 7 | 30 | 34 |
| Connecticut New York. - | 1 | 33 | 43 | 79 | 0 | 0 | 0 | 33 | 43 | 76 |
| New Jersey | 3 | 14 | 4 | 18 | 10 | 6 | 16 | 24 | 10 | 34 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |  |
| Maryland | 3 | 9 | 2 | 11 | 0 | 0 | 0 | 9 | 2 | 11 |
| District of Columbi | 2 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 3 |  |
| Virginia .-.-.- | 5 | 14 | 13 | 27 | 14 | 9 | 23 | 28 | 23 | 50 |
| West Virginia | $\stackrel{2}{2}$ | 4 | 5 | 9 | 0 | $\stackrel{\square}{8}$ | 8 | 4 | 7 | 11 |
| North Carolina | 7 | 9 | $2 \pm$. | 33 | 5 | 22 | 27 | $1 \frac{1}{4}$ | 43 | 60 |
| South Carolina | 4 | $\stackrel{2}{2}$ | 5 | $1{ }^{7}$ | 5 | 20 | 25 | 5 | 25 | 32 |
| Georgia .--- | $\stackrel{4}{3}$ | $\stackrel{2}{3}$ | 9 4 | 117 | 3 6 | 25 | 28 | 5 | $3 \pm$ | 39 14 |
| South Centraīivision: ${ }^{\text {-------- }}$ |  |  |  |  |  |  |  |  |  |  |
| Kentucky ............. | 18 | 15 | 11 | 26 | 8 | 13 | 21 | 23 | 24 | 47 |
| Tennessee | 12 | 20 | 19 |  |  | $5 \pm$ | 94 | 60 | 73 |  |
| Alabama | 6 | 10 | 17 | 89 | $\stackrel{3}{3}$ | 14 |  | 15 | 31 | 92 |
| Louisiana. |  |  |  |  |  |  |  |  |  | 40 |
| Tezas.... | 2 | 5 | 13 | 18 | 2 | 2 | 4 | 7 | 15 | 2 |
| Arsansas | 6 | 22 | 9 | 31 | 5 | 8 | 13 | 27 | 17 | $4 \pm$ |
| Ondian Territory |  |  |  |  |  |  |  |  |  |  |
| Indian Territory-.... |  |  |  |  |  |  |  |  |  |  |
| North Central Division: |  | 68 | 21 | 89 |  | 8 |  |  |  |  |
| Indiana. | 11 | 81 | 4 | 125 | 36 | 18 | 54 | 117 | 62 | 1 129 |
| Illinois -- | 8 | 43 | \% | 63 | 19 | 10 | 29 | 62 | 33 | 95 |
| Michigan. | 2 | 1 | 3 | 4 | 1 | 1 |  | 2 | 4 |  |
| Wisconsin. | , | 14 | 0 | $1 \pm$ | 0 | 7 | 7 | $1 \pm$ | 7 | 21 |
| Minnesota | 2 | 8 | 0 | 8 | 2 | 1 | 3 | 10 | 1 | 1 |
| Iowa... | 10 | $4 \pm$ | 21 | 63 | 11 | 17 | 28 | 35 | 38 | 43 |
| Missouri. ${ }^{\text {North }}$ Dakota | 5 | 25 | 11 | 36 | 13 | 3 | 16 | 38 | 14 | 52 |
| North Dakota | 1 | 4 | 2 | ${ }_{6}$ | $\stackrel{2}{0}$ | 0 | ${ }_{0}^{2}$ | 4 | 2 |  |
| Nebraska ... | 3 | 21 | 14 | 35 | 3 | 1 | 4 | 24 | 15 | 8 |
| Kansas --..--. | 6 | 34 | 16 | 50 | 12 | 13 | 25 | 46 | 29 | $\%$ |
| Western Division: <br> Montana |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Oregon-.... California. | 1 | 1 | 1 | 2 | 0 | 0 | 0 | --1 | 1 | ------5 |

Table 10．－Summary of statistics of private normal schools in 1890－1900．
STUDENTS AND COURSES OF STUDY．

| State or Territory． | Students in normal depart－ ment． |  |  | Students in busi－ ness courses． |  |  | Other students in secondary grades． |  |  | Pupils in elemen－ tary grades． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { ت゙ } \\ & \text { O } \\ & \text { H } \end{aligned}$ | 盛 |  | \％ |  | 完 | － | $\begin{gathered} \stackrel{\Delta}{\leftrightarrows} \\ \text { H } \end{gathered}$ | 碳 | ت゙ |
| United States．．．．．． | 11， 737 | 10， 435 | 23,172 | 4，339 | 1，609 | 5，948 | 3，817 | 2，798 | 6，615 | 4，925 | 5，533 | 10，458 |
| North Atlantic Division． | 241 | $71 \%$ | 953 | 125 | 84 | 909 | 94 | 127 | 221 | 50 | 72 | 128 |
| South Atlantic Division． | 444 | 974. | 1，418 | 100 | 42 | 142 | 286 | 307 | 593 | 1，324 | 2， 144 | 3，458 |
| South Central Division．－ | 1，652 | 1，589 | 3， 191 | 366 | 114 | － 480 | 608 | 413 | 1，021 | 2，064 | $\stackrel{2}{2}, 0 \dot{3}$ | 4， 127 |
| North Central Division．－ | 9，391 | 7，097 | 16，488 | 3， 729 | 1，359 | 5，088 | 2，8\％\％ | 1，947 | 4，773 | 1，473 | 1，231 | 2，704 |
| Western Division ．．．．．．．．． | 9 | 113 | 12： | 19 | 10 | 29 | － 3 | 4 | － 7 | 1， 14 | ， 23 | 37 |
| North Atlantic Division： <br> Maine |  |  |  |  |  |  |  |  |  |  |  |  |
| New Hampshire ．－． |  |  |  |  |  |  |  |  |  |  |  |  |
| Vermont－－－－－－ |  |  |  |  |  |  |  |  |  |  |  |  |
| Massachusetts | 0 | 205 | 205 | 0 | 0 | 0 | 0 | $2)$ | 2 | 0 | 0 | 0 |
| Rhode Island <br> Connecticut |  |  |  |  |  |  |  |  |  |  |  |  |
| New York． | 100 | 354 | 451 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Jersey |  |  |  |  |  |  |  |  |  |  |  |  |
| Pennsyivania | 141 | 153 | 294 | 125 | 81 | 209 | 94 | 105 | 199 | 50 | 72 | $12 \%$ |
| South Atlantic Division： <br> Delaware． |  |  |  |  |  |  |  |  |  |  |  |  |
| Maryland | 33 | 45 | 78 | 10 | 0 | 10 | 0 | 0 | 0 | 19 | 1 | 20 |
| Districe of Columbia＿ | 0 | 38 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Virginia | 35 | 143 | 178 | 21 | 5 | 26 | 98 | 109 | 207 | 95 | 169 | 264 |
| West Virginia - －－－－－－ | 58 | 74 | 132 | 5 | 0 | 5 | 10 | 10 | 20 | 43 | 47 | 90 |
| North Cavolina | 144 | 346 | 490 | 10 | 15 | 25 | 45 | 70 | 115 | 378 | 645 | 1，023 |
| South Carolina | 85 | 161 | 246 | 0 | 0 | 0 | 0 | 0 | 0 | 371 | 458 | ， 829 |
| Georgia | 57 | 123 | 180 | 40 | 20 | 60 | 76 | 49 | 125 | 399 | 734 | 1，083 |
| Florida． | 3： | 44 | 76 | 14 | 2 | 16 | 57 | 69 | 126 | 89 | 90 | 179 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kontucky | 341 | 411 | 752 | 207 | 36 | 243 | 74 | 66 | 110 | 148 | 189 | 337 |
| Tennessee | 517 | 488 | 1，005 | 70 | 57 | 127 | 389 | 228 | 604 | 767 | 858 | 1，625 |
| Alabama | 349 | 213 | 568 | 6 | 5 | 11 | 7 | 41 | 48 | 489 | 205 | 694 |
| Mississippi ．－．．．－．．－． | 99 | 99 | 198 | 19 | 6 | 25 | 40 | 14 | 54 | 406 | 438 | 844 |
| Louisiana ．－－－－－－－－－ |  |  |  |  |  |  |  |  |  |  |  |  |
| Texas－－ | 95 | 81 | 176 | 27 | 3 | 30 | 35 | 26 | 61 | 28 | 204 | 232 |
| Arkansas． | 251 | 247 | 498 | 37 | \％ | 44 | 70 | $4 \frac{1}{4}$ | 114 | 226 | 169 | 395 |
| Oklahoma |  |  |  |  |  |  |  |  |  |  |  |  |
| Indian Territory |  |  |  |  |  |  |  |  |  |  |  |  |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio－．－．－．－．．．．－－－．．－ | 2， 009 | 1，319 | 4，298 | ， 391 | 138 | 593 | 1，445 | 449 | 1，884 | 89 | 70 | 159 |
| Indiana | 2，666 | 2，165 | 4， 831 | 1，016 | 366 | 1，38\％ | 614 | $8 \frac{14}{4}$ | 1， 408 | 431 | 115 | 546 |
| Iliinois | 1，138 | 1，112 | 2，230 | 693 | 140 | 835 | 293 | 155 | 380 | 300 | 286 | 586 |
| Michigan | 71 | 93 | 167 | 88 | 183 | 213 | 10 | 10 | 29 | 8 | 0 | 13 |
| Wisconsin | 42 | 21 | 66 | 40 | 0 | 40 | 2 | 0 | 9 | 78 | 80 | 152 |
| Minnesota | 35 | 30 | 63 | 14 | 4 | 18 | 4 | 1 | 0 | 74 | 40 | 114 |
| Iowa． | 1，010 | 800 | 1，830 | 444 | 232 | 676 | 216 | 181 | $39 \%$ | 170 | 145 | 315 |
| Missouri | 744 | 449 | 1，193 | $10 \%$ | 52 | 244 | 31 | 8.2 | 113 | 62 | 70 | 132 |
| North Dakota | 10 | 50 | 35 | 63 | 0 | 60 | 0 | 0 | 0 | 35 | 30 | 65 |
| South Dakota | 65 | $8 \pm$ | 149 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 |
| Nebraska | 501 | \％54 | 1，235 | 578 | 194 | 778 | 0 |  |  | 150 | 316 | 465 |
| Kansas | 191 | 227 | 418 | 21.1 | 103 | 319 | 279 | 225 | 504 | 82 | 74 | 156 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana |  |  |  |  |  |  |  |  |  |  |  |  |
| Wyoming |  |  |  |  |  |  |  |  |  |  |  |  |
| Colorado |  | 90 | 97 | 17 |  | 26 | 3 | 4 |  | 14 | 23 | 37 |
| New Mexico |  |  |  |  |  |  |  |  |  |  |  |  |
| Arizona |  |  |  |  |  |  |  |  |  |  |  |  |
| Utah． |  |  |  |  |  |  |  |  |  |  |  |  |
| Nevada |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho |  |  |  |  |  |  |  |  |  |  |  |  |
| Washingto |  |  |  |  |  |  |  |  |  |  |  |  |
| Oregon ．－．．．．．．．．．．．．．．－ |  |  |  |  |  |  |  |  |  | 0 | 0 |  |
| Cailfornia－－．－．－－－－－－ |  |  |  |  |  |  |  | 0 | 0 | 0 | 0 | 0 |

Table 11.-Summary of statistics of private normal schools in 1899-1900.

## TOTAL ENROLLMENT OF STUDENTS, ETC.

| State or Territory. | Total enrollment in all departments. |  |  | Colored students included in normal department. |  |  | Number of children in model school. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\mathrm{Fe}{ }^{-}$ male. | Total. | Male. | Female. | Total. | Male. | Female. | Total. |
| United States | 24,818 | 20,375 | 45,193 | 965 | 1,285 | 2,250 | 1,476 | 1,588 | 3,074 |
| North Atlantic Division South Atlantic Division South Central Division North Central Division Western Division .......... | $\begin{array}{r}510 \\ 2,154 \\ 4,690 \\ 17,419 \\ 45 \\ \hline\end{array}$ | $\begin{array}{r}995 \\ 3,467 \\ 4,129 \\ 11,634 \\ 150 \\ \hline\end{array}$ | $\begin{array}{r}1,505 \\ 5,621 \\ 8,819 \\ 29,053 \\ 805 \\ \hline\end{array}$ | $\begin{array}{r} 0 \\ 311 \\ 642 \\ 12 \\ 0 \\ \hline \end{array}$ | $\begin{array}{r} 0 \\ 641 \\ 631 \\ 12 \\ 1 \end{array}$ | $\begin{array}{r} 0 \\ 952 \\ 1,273 \\ 24 \\ 1 \\ \hline \end{array}$ | $\begin{array}{r} 275 \\ 183 \\ 618 \\ 376 \\ 24 \end{array}$ | $\begin{array}{r} 255 \\ 248 \\ 711 \\ 357 \\ 27 \end{array}$ | $\begin{array}{r}530 \\ 431 \\ 1,329 \\ 733 \\ \hline 51 \\ \hline\end{array}$ |
| North Atlantic Division: <br> Maine <br> New Hampshire |  |  |  |  |  |  |  |  |  |
| Vermont <br> Massachusetts <br> Rhode Island | 0 | 227 | 227 | 0 | 0 | 0 | 0 | 0 | 0 |
| Connecticut <br> New York - <br> New Jersey. | 100 | 354 | 454 | 0 | 0 | 0 | 275 | 255 | 530 |
| Pennsylvania South Atlantic Division: Delaware | 410 | 414 | 824 | 0 | 0 | 0 | 0 | 0 | $\overline{0}$ |
| Maryland | 62 | 46 | 108 | 0 | 0 | 0 |  |  |  |
| District of Columbia. | 0 | 38 | 38 | 0 | 22 | 22 | 28 | 40 | 68 |
| Virginia - | 249 | 426 | 675 | 8 | 69 | 76 | 0 | 0 | 0 |
| West Virginia | 116 | 131 | 247 | 38 | 60 | 98 | 0 | 0 | 0 |
| North Carolina | 577 | 1,076 | 1,6さ3 | 112 | 188 | 300 | 77 | 112 | 189 |
| South Carolina --.----- | 456 | 619 | 1,075 | 85 | 161 | 246 | 29 | 38 | 67 |
|  | 502 192 | 9.6 205 | 1,428 397 | $5 \%$ 11 | 123 18 | 180 29 | 24 | $\stackrel{33}{23}$ | 5 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Kentucky - | ${ }_{1}^{770}$ | \% 702 | 1,472 | 12 | 28 | 40 | $3{ }^{3 /}$ | 43 | £0 |
| Tennessee | 1, 736 | 1,625 | 3,361 1,315 | 254 349 | ${ }_{213}^{311}$ | 565 562 | 2923 | 367 105 | 659 163 |
| Mississippi | 564 | 557 | 1,121 | ${ }_{2} 2$ | ${ }_{34}$ | 61 | 142 | 135 | 276 |
| Louisiana |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Texas.... } \\ & \text { Arkansas } \end{aligned}$ | 185 | 314 | 499 | 0 | 45 0 | 45 0 | 8 | 0 | ${ }^{0}$ |
| Oklahoma | $58 \pm$ | 467 | 1,051 | 0 | 0 | 0 | 89 | 61 | 150 |
| Indian Territory |  |  |  |  |  |  |  |  |  |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohio -..- | 4,834 | 1,976 | 6,810 | 0 | 0 | 0 | 47 | 60 | 107 |
| Indiana | 4, 727 | 3,490 | 8,217 | 5 | 4 | ${ }^{9}$ | 79 | 35 | 114 |
| Michigan | 2,398 180 | 1,693 | 4,051 | 6 0 | 7 | 13 0 | \% | 79 0 | 149 0 |
| Wisconsin | 156 | 104 | 260 | 0 | 0 | 0 | 72 | 80 | 159 |
| Minnesota | 128 | 75 | 203 | 1 | 1 | 2 | 88 | 79 | 167 |
| Iowa . | 1,840 | 1,378 | 3,218 | , | 0 | 0 | I | 15 | 2 |
| Missouri | 1, 029 | 653 | 1,682 | 0 | 0 | 0 | 5 | 3 |  |
| North Dakota | +110 | 50 84 | 160 149 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Dakota | 65 1,229 | - 8 84 | 2,493 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 |
| Kansas. | ${ }^{1} 63$ | 1,634 | 1,397 | 0 | 0 | 0 | 8 | 0 | 14 |
| Western Division: Montana. |  |  |  |  |  |  |  |  |  |
| Wyoming.- |  |  |  |  |  |  |  |  |  |
| Colorado. <br> New Mexico | 41 | 126 | 167 | 0 | 1 | 1 | 24 | 27 | 51 |
| Arizona .- |  |  |  |  |  |  |  |  |  |
| Utah. |  |  |  |  |  |  |  |  |  |
| Nevada |  |  |  |  |  |  |  |  |  |
| Washington |  |  |  |  |  |  |  |  |  |
| Oregon-..... California | 4 | 24 | 28 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 12.-Summary of statistics of private normal schools in 1899-1900.
NUMBER OF NORMAL AND OTHER GRADUATES.

| State or Territory. | Normal graduates. |  |  | Graduates in business courses. |  |  | Graduates in other courses. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Fe male. | Total. | Male. | $\mathrm{Fe}-$ male. | Total. |
| United States ....... | 1,154 | 1,167 | 2,321 | \%\%2 | 295 | 1,067 | 393 | 181 | 544 |
| North Atlantic Division.. | 25 | 133 | 158 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Atlantic Division .. | 86 | 179 | 265 | 58 | 32 | 90 | 9 | 21 | 39 |
| South Central Division... | 135 | 111 | , 246 | 50 | 22 | 77 | 81 | 42 | 123 |
| North Central Division... | 908 | 734 | 1,642 | 650 | 232 | $88 \%$ | 302 | 107 | 409 |
| Western Division - .-....... | 0 | 10 | 10 | 9 | 9 | 18 | 1 | 11 | 12 |
| North Atlantic Division: <br> Maine. |  |  |  |  |  |  |  |  |  |
| New Hampshire....... |  |  |  |  |  |  |  |  |  |
| Vermont................. | 0 | 66 | 66 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rhode Island |  |  |  |  |  |  |  | 0 | 0 |
| Connecticut |  |  |  |  |  |  |  |  |  |
| New York-.............. | 18 | 60 | 78 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Jersey | 7 | 7 | 14 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maryland | 13 | - | 15 | 0 | ${ }^{-7}$ | 0 | 0 | 0 | 0 |
| District of Columbia- | 0 | 16 | 16 | 0 | 0 | 0 | 0 | 0 | 0 |
| Virginia --... | \% | 15 | 22 | 2 | 0 | 2 | 3 | 0 | 3 |
| West Virginia | 10 | 7 | 17 | 0 | 0 | 0 | 0 | 0 |  |
| North Carolina. | 3 | 32 | 35 | 10 | 12 | 22 | , | 11 | 15 |
| South Carolina | 8 | 27 | 35 | 0 | 0 | 0 | 0 | 0 | 0 |
| Georgia. | 35 | ${ }^{2} 1$ | 106 | 40 | 20 | 60 | 0 | 9 |  |
| Florida ......-..... | 11 | 8 | 19 | 6 | 0 | 6 | 2 | 1 | 3 |
| South Central Division: Kentucky | 33 | 26 | 59 | 1 | 0 | 1 | 1 | 0 | 1 |
| Tennessee ------ --...... | 63 | 71 | 13 \% | 30 | 18 | 48 | 59 | 35 | 94 |
| Alabama - | 5 | 3 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mississippi | 13 | 8 | 21 | 3 | 2 | 5 | 6 | 6 | 12 |
| Tousisiana | () | 0 | 0 | 12 | 1 | 13 | 10 | 1 | 11 |
| Arkansas | 18 | 3 | 21 | 9 | 1 | 10 | 5 | 0 | 5 |
| Oklahoma -.......-....- |  |  |  |  |  |  |  |  |  |
| Indian Territory -...-* |  |  |  |  |  |  |  |  |  |
| Ohio | 249 | 127 | 376 | 93 | 28 | 121 | 170 | 19 | 189 |
| Indiana | $33 \%$ | 261 | 598 | 49 | 25 | 74 | 31 | 7 | 38 |
| Illinois. | 73 | 41 | 114 | 27 |  | 48 | 12 | 8 | 20 |
| Michigan | 16 | $\because 1$ | $3 \%$ | 23 | 29 | $5 \%$ | 0 | 0 | 0 |
| Wisconsin | 12 | 3 | 15 | 3 | 0 | 3 | 0 | 0 | ( |
| Minnesota | 13 | 13 | 26 | 0 | 0 | 0 | 8 | 9 | 12 |
| Iowa | 63 | 79 | 144 | 94 | 41 | 13. | 32 | 25 | $5 \%$ |
| Missouri | 20 | 8 | 28 | 10 | 0 | 10 | 3 | 8 | 11 |
| North Dakota |  |  |  | 4 | 2 | , | 1 | 2 | 3 |
| South Dakota Nebraska....- | 4 | 11 | 15 | 0 | 0 | 9 | $\stackrel{2}{2}$ | 6 | 8 |
| Nebraska ....-.-......... | 91 | 137 | 228 | 271 | 48 | 319 | ${ }^{0}$ | 0 | 0 |
| Western Division: | 28 | 33 | 61 | 76 | 38 | 114 | 43 | 23 | 66 |
| Western Division: Montana. |  |  |  |  |  |  |  |  |  |
| Wyoming -- |  |  |  |  |  |  |  |  |  |
| Colorado-...... | 0 | 10 | 10 | 7 | 8 | 15 | 0 | 3 | 3 |
| New Mexico Arizona |  |  |  |  |  |  |  |  |  |
| Utah -- |  |  |  |  |  |  |  |  |  |
| Nevada |  |  |  |  |  |  |  |  |  |
| Idaho -- |  |  |  |  |  |  |  |  |  |
| Oregon...... |  |  |  |  |  |  |  |  |  |
| California | 0 | 0 | 0 | 2 | 1 | 3 | 1 | 8 |  |

Table 13.-Summary of stalistics of private normal schools in 1892-1900.
INCOME FROM VARIOUS SOURCES.


Table 14.—Summary of statistics of private normal schools in 1899-1900.
VALUE OF BUILDINGS AND OTHER PROPERTY.


Table 15.-Percentage of male and female students and percentage of graduates to total number in normal course in public and private normal schools in 1899-1900.

| State or Territory. | In public normal schools. |  |  | In private normal schools. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Graduates. | Male. | Female. | Graduates. |
| United States. | 26.22 | 73.78 | 19.17 | 53.94 | 47.06 | $10.4 \%$ |
| North Atlantic Division | 22.26 | 77.74 | 27.85 | 25.29 | 74.71 | 16.58 |
| South Atlantic Division | 27.37 | 72. 63 | 16. 25 | 31.31 | 68.69 | 18.69 |
| South Central Division. | 37.45 | 62.54 | 11.68 | 51.77 | 48. 23 | 7.71 |
| North Central Division | 28.30 | 71.70 | 11. 59 | 56.96 | 43.04 | 9.96 |
| Western Division....... | 21.72 | 78.28 | 24.45 | 7.38 | 92.62 | 8. 20 |
| North Atlantic Divisiqn: |  |  |  |  |  |  |
| Maine --.----- | 17.93 | ${ }_{9} 8.07$ | $\begin{aligned} & 26.98 \\ & 32.20 \end{aligned}$ |  |  |  |
| New Hampshire | 10.71 | 99.29 | 32. 20 | 0 | 100.00 | 32.20 |
| Massachusetts | 7.18 | 92.82 | 3\%.77 |  |  |  |
| Rhode Island. | 0 | 100.00 | 19.07 |  |  |  |
| Connecticut. | . 87 | 93.13 | 33.29 |  |  |  |
| New York. | 17.27 | 83.73 | 29.40 | 22.03 | 76.97 | 17.18 |
| New Jersey | 7.10 | 92. 90 | 28.01 |  |  |  |
| Pennsylvania --..... | 36.02 | 63.98 | 24.79 | 47.96 | 52. 04 | 4.76 |
| South Atlantic Division: <br> Delaware | 0 | 100.00 | 60.00 |  |  |  |
| Maryland | 4.08 | 95.92 | 25. 00 | 4.831 | 57.69 | 19.23 |
| District of Columbia | 8. 76 | 91.24 | 45.16 |  | 100.00 | 42. 10 |
| Virginia. | 22. 60 | 77.40 | 21.67 | 19.66 | 80.34 | 12.35 |
| West Virginia | 50.16 | 49.84 | 20.99 | 43.94 | 56.06 | 12.87 |
| North Carolina | 18.89 | 81.11 | 10.40 | 29.39 | 70.61 | 7.14 |
| South Carolina | ${ }^{0}$ | 100.00 | 15.35 | 34.55 | 65.45 | 14.23 |
| Georgia | 20.5\% | 73.48 | 2.02 | 31.67 | 68.33 | ${ }_{28.89}$ |
| South Central Division: | 38.33 | 61.67 | 3.33 | 42.11 | 57.89 | 25.00 |
| Kentucky ............ | 40.65 | 59.35 | 39.03 | 45.35 | 54.65 | 7.85 |
| Tennessee | 34.77 | 65.23 |  | 51.44 | 48.56 | 13.63 |
| Alabama | 38.01 | 61.99 49.3 | 13.11 | 62.10 50.00 | 37.90 50.00 | 1.42 |
| Mississippi | 12. 68 | 49.32 87.26 | 5.75 18.26 |  |  | 10.60 |
| Texas... | 40.18 | $59.8{ }^{\text {\% }}$ | 13.74 | 53.98 | 46.02 |  |
| Arkansas. Oklahoma | ${ }^{58.06}$ | 41.94 |  | 50.40 | 49.60 | 4.22 |
| Indian Territory | 42.97 | 57.03 | 4.89 |  |  |  |
| North Central Division: |  |  |  |  |  |  |
| Ohio - | 2.26 | 97. 74 | 49.39 | 68. 80 | 31. 20 | 8.89 |
| Indiana - | 38.28 | 61.72 | 1. 35 | 55.19 | 44.81 | 12.38 |
| Illinois | 24.91 | \%5.06 | 4.78 | 50.58 | 49.42 | 5.07 |
| Michigan | 22. 19 | 77.81 | 8.45 | 44.31 | 55. 69 | 22. 16 |
| Wisconsin | 27.82 | \%2. 18 | 19.31 | 63.64 | 36.36 | 22.73 |
| Minnesota | 18.46 | 81.54 | 26.20 | 54.55 | 45.45 | 39.39 |
| lowa...- | 27.22 | 77.78 | 8.62 | 55.19 | 44. 81 | 7.87 |
| Missouri | 41.28 | 58.72. | 7.43 | 6.2. 36 | 37.64 | 2.35 |
| North Dakota | 31.41 | 68.59 | 7.19 | 42.86 | 57.14 |  |
| South Dakota | 29.38 | 70.62 | 10.63 | 43.62 | 55.38 | 10.07 |
| Nebraska | 27.09 | 72.91 | 2.88 | 39.92 | 60.08 | 18.17 |
| Western Division: | 37.31 | 62.69 | 7. 40 | 45.69 | 54.31 | 14.59 |
| Western Division: Montana ...... | 13.26 | 86. 74 | 7.14 |  |  |  |
| Wyoming |  |  |  |  |  |  |
| Colorado. | 27.06 | 72.94 | 18.57 | 7.21 | 92.79 | 10.31 |
| New Mexico | 29.32 | 70.68 | 33.08 |  |  |  |
| Arizona | 34.48 | $65.5 \%$ | ${ }^{0}$ |  |  |  |
| Utah. | 45.95 | 54.05 | 0 |  |  |  |
| Idaho | 36.21 | 63.79 | 13.17 |  |  |  |
| Washingto | 21.32 | 78.68 | 9.72 |  |  |  |
| Oregon | 32.02 | 67.98 | 20.37 |  |  |  |
| California | 13.33 | 86.67 | 33.60 | 8.00 | 92.00 | 0 |

Table 16. -Normal students in universities and colleges and public and private high schools in 1999-1900.

| State or Territory. | In universities and colleges. |  |  |  | In public high schools. |  |  |  | In private high schools. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\stackrel{\dot{\Xi g}}{\stackrel{y y}{c \mid c}}$ |  |  | $\begin{aligned} & \dot{\sim} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\stackrel{\oplus}{\stackrel{B}{3}}$ | 边 | + |  | 永 |  | $\begin{aligned} & \text { तై } \\ & \text { से } \\ & \text { E-1 } \end{aligned}$ |  |
| United States | 243 | 4,030 | 5,494 | 9,524 | 506 | 2,632 | 8, 071 | 10, \%03 | 417 | 3, 745 | 4, \%\%\% | 8,522 | 8, 749 |
| North Atlantic Division | 36 | 783 | 748 | 1,531 | 166 | 502 | 4,564 | 5,066 | 78 | 625 | 1,116 | 1, 741 | 8,338 |
| South Atlantic Division | 45 | 606 | \%93 | 1,399 | 40 | 167 | 173 | 640 | 86 | 706 | 938 | 1,644 | 3,683 |
| South Central Division. | 50 | 844 | 1,267 | 2,111 | 126 | 1,065 | 1,162 | 2,227 | $13 \%$ | 1,363 | 1,346 | 2,709 | \%, 047 |
| NorthCentral Division. | 94 | 1,535 | 1,998 | 3,533 | 169 | 895 | 1,837 | 2,73\% | 87 | 950 | 1,118 | 2,038 | 8,333 |
| Western Division .-.... | 18 | 262 | 688 | 950 | 5 | 3 | 35 | 38 | 30 | 101 | 1,259 | 360 | 1,348 |
| NorthAtlantic Division: <br> Maine | 3 | 9 | 23 | 32 | 9 | 11 | 67 | 78 | 3 | 15 | 84 | 99 | 209 |
| New Hampshire |  |  |  |  | 1 | 0 | 1 | 1 | 2 | 120 | 5 | 125 | 126 |
| Vermont......------ | 1 | 14 | 16 | 30 | 16 | 33 | 105 | 138 | 8 | 12 | 45 | 57 | 225 |
| Miassachus | 3 | 0 | 2:8 | 228 | 4 | 0 | 188 | 188 | 4 | 5 | 25 | 30 | 446 |
| Rhode Island | 1 | $1 \%$ | 25 | 42 | 1 | 2 | 1 | 3 | 1 | 0 | 2 | 2 | 47 |
| Connecticut |  |  |  |  | 3 | 0 | 190 | 190 | 2 | 1 | 1 | 2 | 19\% |
| New York | 12 | 535 | $3 \% 2$ | 85 | 84 | 349 | 3,181 | 3,530 | 18 | 84 | 187 | 271 | 4,658 |
| New Jersey- | $\stackrel{\sim}{1}$ | 13 | 14 | 27 | 13 | 5 | + 79 | 84 | 3 | 5 3 | $4 \%$ | 52 | . 163 |
| Pennsylvania--- | 14 | 195 | 120 | 315 | 35 | 102 | 752 | 854 | 36 | 383 | 720 | 1,103 | 2,27\% |
| SouthAtlantic Division: <br> Delaware | 1 | 0 | 3 | 3 | 0 | 0 | 0 | 0 |  |  |  |  |  |
| Mar yland ---....... | 3 | $\stackrel{4}{\sim}$ | 74 | 78 | 1 | 1 | 3 | 4 | 5 | 18 | 8 | 26 | 108 |
| District of Columbia | 2 | $1 \%$ | 69 | 86 | 0 | 0 | 0 | 0 |  |  |  |  | 86 |
| Virginia. | 5 | 108 | 36 | 144 | \% | 40 | 187 | $22 \%$ | 14 | 65 | 200 | 205 | 636 |
| West Virginia | 2 | 22 | 21 | 43 | 3 | 5 | 30 | 35 | 6 | 97 | 127 | 224 | $30 \%$ |
| North Carolina | $\stackrel{6}{6}$ | 196 | 224 | 420 | 2 | 2 | 8 | 10 | 28 | 230 | 221 | 451 | 881 |
| South Csrolina | \% | 111 | 75 | 186 | 7 | 3 | $\% 9$ | 82 | 14 | 151 | 179 | 330 | 598 |
| Georgia | . 15 | 1:24 | 198 | $3 \% \sim$ | 14 | 89 | 95 | 184 | 16 | 126 | 186 | 312 | 818 |
| Florida | 4 | 24 | 93 | $11 \%$ | 6 | 27 | 71 | 98 | 3 | 19 | 17 | 36 | 251 |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 11 | 223 | 262 | 485 | 16 | 133 | 144 | $2 \sim 7$ | 35 | $3{ }^{3} 0$ | 350 | 720 | 1,482 |
| Tennessee | 13 | 362 | 603 | 965 | 14 | 84 | 63 | 147 | 29 | 313 | 206 | 569 | 1, 681 |
| Alabama. | 5 | 110 | 92 | 203 | 8 | 55 | 58 | 113 | 15 | 73 | 83 | 156 | . 471 |
| Mississipp | 8 | 33 | 185 | 218 | 23 | 163 | 296 | 449 | 18 | 235 | 237 | 472 | 1,139 |
| Louisiana | 2 | 12 | 40 | $5 \stackrel{3}{2}$ | 3 | 3 | \% | 10 | 7 | 31 | 93 | 124 | 186 |
| Texas | 6 | (i\% | 45 | 112 | 47 | 424 | 475 | 899 | 25 | $25 \%$ | 233 | 488 | 1,499 |
| Arkansas | 3 | 35 | 30 | 65 | 15 | 203 | 129 | 332 | $\tau$ | 81 | 90 | 171 | 568 |
| Oklahoma ---.-.- |  |  |  |  | 0 | 0 | 0 | 0 |  |  |  |  | 1 |
| Indian Territory --- | 2 | 2 | 10 | 12 | 0 | 0 | 0 | 0 | 1 | 5 | 4 | 9 | 21 |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio--....--.-.------------- | 13 | 234 | 264 | 488 | 51 | 244 | 430 | 6\% | 11 | -38 | 89 | 127 | 1,289 |
| Indinois | 16 | 300 | 316 | 616 | 118 | 35 | 61 | 118 | 16 | 139 | 151 | 290 | 1,002 |
| Michigan | 7 | 73 | 60 | 133 | 15 | 30 | 111 | 141 | 3 | -56 | 81 | 137 | 1,411 |
| Wisconsin | 6 | 1.3 | 112 | 285 | 10 | 51 | 134 | 185 | 1 | 30 | 0 | 30 | 500 |
| Minnesota | 4 | 51 | 56 | $10 \%$ | 7 | 65 | $\tau 2$ | 137 | 5 | 82 | 74 | 156 | 400 |
| Iowa | 12 | $18 \%$ | 416 | 598 | 23 | 94 | 202 | 296 | 14 | 83 | $20 \%$ | 290 | 1,184 |
| Missouri | 10 | $\cdot 150$ | 110 | 260 | 20 | 15.5 | 452 | 607 | 24 | 198 | 224 | $42 \%$ | 1,289 |
| Noith Dakota | 1 | 8 | 15 | 23 | 0 | 0 | 0 | 0 |  |  |  |  | 23 |
| South Dakota. | 5 | 31 | $11 \%$ | 148 | 2 | 12 | 8 | 20 |  |  |  |  | 168 |
| Nebraska | 5 | 52 | 199 | 2.1 | 6 | 12 | 38 | 50 | 2 | 3 | 12 | 15 | 316 |
| Kansas | 12 | 244 | 288 | 532 | 16 | 144 | 205 | 409 | 4 | 39 | 49 | 88 | 1,029 |
| Western Division: Montana | 2 | , | $1 \%$ | 21 |  |  |  |  |  |  |  |  | , |
| Wyoming | 1 | 0 | 14 | 14 |  |  |  |  |  |  |  |  | 14 |
| Colorado | 1 | 16 | 31 | $4 \sim$ | 1 |  |  | 8 | 1 | 0 | 16 | 16 | 71 |
| New Mexic | 1 | 0 | 19 | 19 | 0 | 0 | 0 | 0 |  |  |  |  | 19 |
| Arizona |  |  |  |  | 0 | 0 | 0 | 0 |  |  |  |  | 510 |
| Utah - | 2 | 130 | $2 \% 4$ | 404 | 0 | 0 | 0 | 0 | 6 | 57 | 79 | 136 | 510 |
| Nevada |  |  |  |  | 0 | 0 | 0 | 0 |  |  |  |  | 0 |
| Idaho |  |  |  |  | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 7 |  |
| Washington | 2 | 13 | 41 | 57 | 1 | 0 | 2 | 2 | 4 | 20 | 29 | 49 | 108 |
| Oregon_... | 3 | 10 | 57 | 67 | 0 | 0 | 0 | 0 | 10 | 22 | 70 | 92 | 159 |
| California. | 6 | 89 | 232 | 321 | 3 | 1 | 27 | 28 | 3 | 0 | 60 | 60 | 409 |

TABLE 17.--Distribution of students pursuing teachers training courses in various institutions in 1899-1900.

| State or Territory. | In public normal schools. | In private normal schools. | In universities and colleges. | In public high schools. | In private high schools. | $\begin{gathered} \text { Total } \\ \text { normal } \\ \text { students. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States . | 4\%,421 | 22, 1\% | 9,54 | 10, 703 | 8,520 | $98,34 \%$ |
| North Atlantic Division | 17,679 | 953 | 1,531 | 5,066 | 1,741 | 26, 9\%0 |
| South Atlantic Division | 4,228 | 1,418 | 1,399 | 640 | 1,644 | 9,329 |
| South Central Division. | 4,092 | 3,191 | 2,111 | 2,2:7 | 2,709 | 14, 330 |
| North Central Division | 17,537 | 16,488 | 3, 233 | 2,732 | 2,068 | 42,358 |
| Western Division ....... | 3,885 | 122 | 950 | - 38 | , 360 | 5, 355 |
| North Atlantic Division: <br> Maine | 1,071 |  | 32 | \%8 | 99 | 1,280 |
| New Hampshire.. | 1, 118 |  |  | 1 | 125 | 241 |
| Vermont ........ | 252 |  | 30 | 138 | 57 | $4 \% 7$ |
| Massachusetts | 1,\%0 | 205 | $2 \% 8$ | 185 | 30 | 2,421 |
| Rhode Island. | 194 |  | 42 | 3 | 2 | 241 |
| Conmecticut. | 576 |  |  | 190 | $\stackrel{2}{2}$ | 768 |
| New York. | 5, 987 | 454 | $85 \%$ | 3,530 | 271 | 11,099 |
| New Jersey | \%89 |  | 27 | 81 | 5: | $95 \%$ |
| Pennsylvania | 6,9\% | 294 | 315 | 854 | 1,103 | 9,488 |
| South Atlantic Division: <br> Delaware | 25 |  | 3 | 0 |  | 28 |
| Marrland | 39\% | \% 8 | 78 | 4 | 26 | $5 \% 8$ |
| District of Columbia | $21 \%$ | 38 | 86 | 0 |  | 341 |
| Virginia. | 323 | $1 \% 8$ | 141 | 23 | 265 | 1,13i |
| West Virginia | 1,234 | 132 | 43 | 35 | 224 | 1,668 |
| North Carolina. | 923 | 490 | 420 | 10 | 451 | 2,294 |
| South Carolina | 202 | 246 | 186 | 82 | 330 | 1,046 |
| Georgia | 792 | 180 | 202 | 184 | 312 | 1,790 |
| Florida. | 120 | 76 | 117 | 98 | 36 | 417 |
| South Central Division: |  |  |  |  |  |  |
| Kentucky -... | 310 | 782 | 485 | $2 \pi 14$ | 720 | 2,514 |
| Tennessee. | 604 | 1,005 | 965 | 147 | 569 | 3,290 |
| Alabama | 84\% | 562 | 202 | 113 | 156 | 1,880 |
| Mississippi | 365 | 198 | 218 | 449 | 472 | 1,702 |
| Louisiana. | 471 |  | 52 | 10 | 124 | 657 |
| Texas . | 79 | $1 \% 6$ | 112 | 899 | 488 | 2, 454 |
| Arkansas. | 62 | 498 | 65 | 332 | 171 | 1,1刃8 |
| Oklahoma | 651 |  |  | 0 |  | 654 |
| Indian Territory .-. |  |  | 12 | 0 | 9 | 21 |
| North Central Division: |  |  |  |  |  |  |
| Ohio .-. | -5\%5 | 4, 228 | 488 | $67 \frac{1}{2}$ | $12 \%$ | 6,092 |
| Indiana. | 1,32\% | 4,831 | 92 | 117 | 513 | 6, 880 |
| Illinois .-- | 2,103 | 2,250 | 616 | 96 | 290 | 5,383 |
| Miishigan.-. | 2,023 | 16 | 133 | 141 | 137 | 2,601 |
| Wisconsin. - | 2,784 | 66 | 285 | 185 | 30 | 3, 35, |
| Minnesota | 1,439 | 66 | 106 | 137 | 156 | 1,896 |
| Iowa. | 2,204 | 1,830 | 598 | 296 | 290 | 5,218 |
| Missouri | 1,897 | 1,193 | 260 | $60 \%$ | 422 | 4, 3\%9 |
| North Dakota | $41 \%$ | 35 | 23 | 0 |  | 470 |
| South Dakota. | 480 | 149 | 148 | 20 |  | $79 \%$ |
| Nebraska | , 761 | 1,255 | 251 | 50 | 15 | 2,335 |
| Kansas -------- | 1,501 | 418 | 53 | 409 | 88 | $\therefore, 948$ |
| Western Division: |  |  |  |  |  |  |
| Montana | 98 |  | 21 |  |  | 119 |
| W yoming ..... |  |  | 14 |  |  | 11 |
| Colorado. | 377 | 97 | 47 | 8 | 16 | 515 |
| New Mexico | 133 |  | 19 | 0 | - | 132 |
| Arizona | 116 |  |  | 0 |  | 116 |
| Utah | 148 |  | 404 | 0 | 136 | 688 |
| Nevada. |  |  |  | 0 |  |  |
| Idaho. | 243 |  |  | 0 | 7 | 230 |
| Washington | 319 |  | 57 | 2 | 49 | $42 \%$ |
| Oregon -.. | 531 |  | 67 | 0 | 92 | 691 |
| California. | 1,920 | 25 | 321 | 28 | 60 | 2,85 |

Table 18.-Colleges and universities reporting students in teachers' training courses.

| Location. | Institution. | Normal students. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1895. | 1896. | 1897. | 1898. | 1899. | 1900. |  |  |
|  |  |  |  |  |  |  | Male. | $\mathrm{Fe}-$ male. | Total. |
| alabama. |  |  |  |  |  |  |  |  |  |
| Athens. | Athens Female College |  | 8 | 10 | 12 |  | 0 | 5 | 5 |
| Blountsvi | Blount College |  | 14 | 29 | 29 |  |  |  |  |
| Cullman | St. Bernard College |  |  | 14 |  |  | 34 | 0 | 34 |
| Eufaula. | Union Female Colilege |  |  |  |  | 2 | 34 | 0 | t |
| Lafayette | Lafayette College.-. | 9 |  |  |  | 11 | 3 | 12 | 15 |
| Selma--.. | Alabama Baptist Colored | 40 |  |  |  |  | 63 | 61 | 124 |
| Talladega | University. <br> Isbell College |  | 13 | 15 | 3 |  |  |  |  |
| University | University of Alabama |  |  |  |  |  | 10 | 14 | 24 |
| Arizona. |  |  |  |  |  |  |  |  |  |
| Tracson. | University of Arizona (pub- |  |  |  | 4 |  |  |  |  |
| lic). <br> ARKANSAS. |  |  |  |  |  |  |  |  |  |
| Arkadelphia | Arkadelphia Methodist College. |  |  |  | 19 |  |  |  |  |
| Do | Ouachita Baptist College--- | 40 |  |  |  |  |  |  |  |
| Clarksville | Arkadelphia Cumberland | 17 | 9 |  |  |  |  |  |  |
| Conway | Central Baptist College... | 7 |  |  |  |  |  |  |  |
| Fayetteville | Hendrix College Arkansas |  |  | 16 | 6 | 14 | 15 14 | 18 | 16 |
| Little Rock | Philander Smith College |  | 2 |  | 45 | 17 | 6 | 11 | 17 |
| California. |  |  |  |  |  |  |  |  |  |
| Berkeley | University of California (public). a | 100 | 269 | 26.2 | 717 | 598 |  |  |  |
| Claremont. | Pomona College |  |  |  |  | 14 | 3 | 4 | 7 |
| Los Angeles | St. Vincent's College | 30 | 78 |  |  |  |  |  |  |
| Mills Coilege | Mills College <br> California College | 3 |  |  |  | 4 | 0 | 2 | 2 |
| Pasadena | Throop Polytechnic Insti- | 16 | 11 | 10 | 13 | 1.2 | $\frac{1}{1}$ | 20 | 24 |
| San Jose | College of Notre Dame. | 35 | 20 | 10 | 20 | 30 | 0 | 21 | 21 |
| Santa Rosa ....... | Pacific Methodist College--- |  |  | 1 |  |  |  |  |  |
|  | Leland Stanford Junior | 158 | 46 | 50 | 211 | 295 | 80 | 184 | 264 |
| sity. <br> University | University of Southern Cal- |  |  | 18 |  | 9 | 2 | 1 | 3 |
| colorado. | ifornia. |  |  |  |  |  |  |  |  |
| Boulder | University of Colorado |  |  | 65 | 42 |  | 16 | 31 | 47 |
|  | Colorado College and Cutler |  |  |  | 15 | 17 |  |  |  |
| University Park.- | Academy. |  |  |  |  |  |  |  |  |
|  | University of Denver....... |  |  |  |  | 14 |  |  |  |
| delaware. |  |  |  |  |  |  |  |  |  |
| Dover | State College for Colored |  |  |  |  |  | 0 | 3 | 3 |
| DISTRICT OFCOlumbia. |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { Washington .-..... } \\ \text { Do.-........... } \end{gathered}$ | Gallandét College (public) Howard University (public) | $\begin{array}{r} 5 \\ 188 \end{array}$ | $\begin{array}{r} 5 \\ 47 \end{array}$ | 124 | 5 21 | 9 | 3 14 | $\stackrel{2}{67}$ | 81 |
| Florida. |  |  |  |  |  |  |  |  |  |
| De Land ........... | John B. Stetson University |  |  | 29 |  | 48 | 7 | 28 | 35 |
|  | Florida Agricultural College (public). |  |  |  | 19 | 40 | 4 | 32 | 36 |
| Leesburg | Florida Conference College |  |  | 8 | 8 |  |  |  |  |
| St. Leo .... | St. Leo Military College --- | 3 | 2 | 4 | 3 | 5 | 6 | ${ }^{0}$ | ${ }_{6}^{6}$ |
| Tallahassee | State Seminary West of the |  |  |  |  |  | 7 | 33 | 40 |
| Winter Park | Rollins College |  |  | 18 | 8 | 9 |  |  |  |

$a$ Has a pedagogical department.

Table 18.-Colleges and universities reporting students in teachers' training courses-Continued.

| Location. | Institution. | Normal students. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1896. | 1897. | 1898. | 1899. | 1900. |  |  |
|  |  | 1895. |  |  |  |  | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. |
| GEORGIA. |  |  |  |  |  |  |  |  |  |
| Athens | University of Georgia (public). |  |  |  |  | 20 |  |  |  |
| Atlanta | Atlanta Baptist College....- |  |  | $\stackrel{2}{7}$ | 3 189 |  | $\stackrel{2}{10}$ | 0 | 2 |
| Do_ | Atlanta University -------- | 83 | 105 | 127 | 139 | 13 | 10 | 10 | 20 |
| Do. | Morris Brown Coilege .-.-. | 29 | 26 | 16 | 45 | 42 | 3 | 40 | 43 |
| Bowdon | Bowdon College ---.-.---- |  |  |  | 27 | 30 | 18 | 12 | 30 |
| College Park | Southern Female College. -- |  |  | 225 |  |  |  |  |  |
| Cuthbert | Andrew Female College -...- |  | 40 |  | 8 | 4 68 | 0 40 | 6 27 | 6 67 |
| Dahlonega | North Georgia Agricultural College (public). |  | 40 |  | 44 | 68 | 40 | 27 | 67 |
| Dalton | Dalton Female Seminary .-. |  |  |  | 3 | 4 | 0 | 5 | 5 |
| Forsyth | Monroe College |  |  |  |  | 10 | 0 | 6 | 6 |
| Gainesville | Brenau College. |  | 18 |  |  | 35 | 0 | 20 | 20 |
| Lagrange | Lagrange Female College | 14 | 23 | 23 |  |  |  |  |  |
| Do. | Southern Female College |  | 10 |  |  |  | 0 | 20 | 20 |
| Macon | Mercer University | 27 | 10 | 10 | 11 | 10 | 30 | 0 | 30 |
| Oxford | Emory College - |  |  |  |  |  | 15 | 0 | 15 |
| South Atlanta | Clark University |  | 42 | 31 | 47 | 55 | 0 | 45 | 45 |
| Thomasville | Young Female College . |  |  |  | 4 |  | 0 | 2 | $\stackrel{2}{1}$ |
| Wrightsville ----- | Nannie Lou Warthen College. | 18 |  |  |  |  | 6 | 5 | 11 |
| Young Harris ..- | Young L. G. Harris College. |  |  | 25 | 29 |  |  |  |  |
| illinois. |  |  |  |  |  |  |  |  |  |
| Abingdon | Hedding College -- | 29 | 18 | 4 | 4 | 1 |  |  |  |
| Carlinville | Blackburn University | 7 |  |  |  |  |  |  |  |
| Carthage | Carthage Coliege----.--- | 10 | 64 |  |  |  |  |  |  |
| Champaign | University of Illinois (public). | 12 | 31 | 66 | 68 |  |  |  |  |
| Chicago | University of Chicago $a$..-- |  |  |  |  | 300 |  |  |  |
| Do - | St. Ignatius College |  |  |  |  |  | 16 | 0 | 16 |
| Effingham | Austin College | 100 | 130 | 110 | 90 | $1 \% 5$ | 150 | 100 | 250 |
| Elmhurst | Proseminarder Evangel Synode von N. A. |  | 33 |  | 20 | 17 | 10 | 0 | 10 |
| Eureka | Eureka College - |  |  |  |  | 6 |  |  |  |
| Evanston | Northwestern University $a_{-}$ |  | 20 | 20 | 20 | 11 | 4 | 16 | 20 |
| Ewing | Ewing College. |  |  | 9 |  |  | 36 | 14 | 50 |
| Fulton | Northern Illinois College | 30 | 50 | 46 | 35 | 35 |  |  |  |
| Greenville | Greenville College --. -- |  |  |  |  |  | 4 | 7 | 11 |
| Hoopeston | Greer vollege -- | 4 | 51 | 44 | 25 |  |  |  |  |
| Jacksonville | Academy for Young Women |  |  |  |  | 4 | 0 | 4 | 4 |
| Do | Illinois College |  |  | 5 | 8 | 14 | 20 | 0 | 20 |
| Do | Illinois Woman's College | 7 | 7 | 15 | 15 | 18 | 0 | 10 | 10 |
| Knoxvill | St. Mary's School - .-. - .-. | 40 |  |  |  |  |  |  |  |
| Lincoln | Lincoln University .-. |  |  |  |  |  | 9 | 48 | 55 |
| Napervil | Northwestern College | 13 | 12 | 12 |  | 15 | 5 | 7 | 12 |
| Quincy | Chaddock College |  | 10 |  | 25 | 65 | 10 | 12 | 22 |
| Rook Island | Augustana College | 17 | 12 | 5 | 7 | 16 | 6 | 71 | 77 |
| Upper Alton | Shurtleff College | 5 |  |  |  |  |  |  |  |
| Urbana | University of lllinois .....-- |  |  |  |  | 55 | 13 | 5 | 18 |
| Westfield.----.-... | Westfield College .-...-....-. |  | 9 | $1 \%$ | 14 | 18 | 8 | 13 | 21 |
| Wheaton | Wheaton College-------- -- |  |  | 17 |  |  | 9 | 9 | 18 |
| INDIANA. |  |  |  |  |  |  |  |  |  |
| Bloomington | Indiana University (public) $a$. | --- | 52 |  | 128 | 91 |  |  |  |
| Crawfordsville | Wabash College.----------. |  |  |  | 4 | 6 |  |  |  |
| lrvington | Butler College. |  |  |  |  | 20 |  |  |  |
| Merom | Union Christian College | 47 | 54 | 23 | 65 | 50 | 25 | 29 | 54 |
| Moores Hill | Moores Hill College. | 98 | 98 | 20 |  | 20 | 10 | 12 | 22 |
| Ridgeville | Ridgeville College. |  | 90 | 65 | 35 |  |  |  |  |
| Upland ----------- | Taylor University ------------- | 50 | 40 | 52 | 32 | 44 | 12 | 4 | 16 |
| INDIAN TERRITORY. |  |  |  |  |  |  |  |  |  |
| Bacone | Indian University | 19 |  |  |  |  | 2 | 4 | 6 |
| Muscogee. | Henry Kendall College . |  |  |  |  |  | 0 | 6 | 6 |

a Has a pedagogical department.

Table 18.-Colleges and universities reporting students in teachers' training courses-Continued.

| Location. | Institution. | Normal students. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1895. | 1896. | 1897. | 1898. | 1899. | 1900. |  |  |
|  |  |  |  |  |  |  | Male. | Female. | Total. |
| IOWA. |  |  |  |  |  |  |  |  |  |
| Cedar Rapids. | Coo College. |  |  |  |  |  | $\underset{2}{2}$ | 8 | 10 |
| Charles City -- | Charles City College | 33 | 32 | 22 | 29 | 27 | 5 | 27 | 32 |
| College Springs | Amity College | 49 | 16 | 18 | 37 173 | 13 219 | 21 | 10 | 31 |
| Des Moines .-.- | Drake University | 88 |  |  | 173 | 219 | 54 | 195 | 249 |
| Fayette | Upper Iowa University |  | 28 |  | 33 | 16 | 5 | 20 | 25 |
| Grinnell | Iowa College .-....-. - |  |  |  | 15 | 6 | 0 | 5 | 5 |
| Hopkinton | Lenox College |  |  |  |  | 11 |  |  |  |
| Indianola | Simpson College .- | 66 | 124 | 114 | 121 | 67 |  |  |  |
| Iowa City | State University of Iowa (public).a |  | 5.1 | 54 |  | 70 | 38 | 43 | 81 |
| Lamoni | Graceland College ........... |  |  |  |  |  | 0 | 4 | 4 |
| Le Grand | Palmer College |  |  |  |  |  | 5 | 3 | 8 |
| Mount Pleasan | German College | ${ }_{6}^{6}$ | 4 | 2 |  |  |  |  |  |
| Do......... | Iowa Wesleyan Üniversity | 5 | 19 | 19 | $1 \%$ |  |  |  |  |
| Mount Vernon | Cornell College .-...---.-.-. | 64 | 78 | 72 | 72 | 138 | 40 | 24 | 64 |
| Pella | Central University of Lowa. |  |  | 30 | 26 | 24 | 5 | 41 | 46 |
| Sioux City | Morningside College .-.-.-. |  | 12 | 55 | 42 | 15 | 7 | 36 | 43 |
| Storm Lake | Buena Vista College ......... | 33 | 59 | 47 | 48 | 45 |  |  |  |
| Toledo ....- | Western College .----- -- -- | 81 | 14 |  | 32 |  |  |  |  |
| KANSAS. |  |  |  |  |  |  |  |  |  |
| Atchison | Midland College |  | 9 |  |  |  |  |  |  |
| Baldwin | Baker University | $6 \%$ | 76 |  | 92 | 80 | 66 | 45 | 111 |
| Dodge City | Soule College. | 49 | 20 | 28 | ¢8 | 28 |  |  |  |
| Emporia - | College of Emporia |  |  |  |  |  | 4 | 7 | 11 |
| Enterprise | Central College. | 20 |  |  |  |  |  |  |  |
| Highland | Highland University |  | 4 | 3 |  |  |  |  |  |
| Holton .- | Campbell University --- | 8 | 18 | 18 | 67 | 85 | 39 | 46 | 85 |
| Lawrence | University of Kansas (public). 6 |  |  | 39 |  |  | 14 | 37 | 51 |
| Lecompton | Lane University .-.-......... | 23 |  | 20 | 44 | 32 | 13 | 12 | 25 |
| Lincoln | Kansas Christian College |  |  |  |  | 30 | 25 | 24 | 49 |
| Lindsborg | Bethany College | 27 |  |  | 23 | 26 | 14 | 19 | 33 |
| Ottawa - | Ottawa University --........- | 13 | 11 | 8 | 26 | 9 | 4 | 7 | 11 |
| Salina | Kansas Wesleyan University. | 50 | 54 | 60 | 66 | ${ }^{7} 1$ | 45 | 26 | 71 |
| Sterling | Cooper Memorial College .- | 12 |  | 5 |  | 3 | 10 | 30 | 40 |
| Topeka | Washburn College . |  |  |  | 4 |  |  |  |  |
| Wichita | Fairmount College .-. |  |  |  |  |  |  |  | 17 |
| Winfleld | Southwest Kansas College. | 18 | 36 | 34 | 34 | 42 | 8 | 20 | 28 |
| KENTUCKY. |  |  |  |  |  |  |  |  |  |
| Berea | Berrea College . .-.....-......- | 4 |  |  | 41 | 54 | 44 | 37 | $\delta 1$ |
| Columbia | Columbia Christian College. | 35 |  |  |  |  |  |  |  |
| Georgetown | Georgetown College |  |  |  |  | 46 | 18 | 12 | 30 |
| Glasgow .-. | Liberty College .-.. | 27 | 12 | 40 |  | 16 | 5 | 20 | 25 |
| Harrodsburg | Beaumont College |  |  |  |  | 12 |  |  |  |
| Hopkinsville. | South Kentucky College.... | 30 |  | 15 |  | 10 | 4 | 6 | 10 |
| Lexington. | A. and M. College of Kentucky (public). |  |  | 79 | 39 | 111 | 82 | 56 | 138 |
| Do. | Kentucky University .-....- |  |  |  |  |  | 37 | 20 | 57 |
| Millersburg | Millersburg Female College | 9 | ------ |  |  | 15 | 0 | 25 | 25 |
| Nicholasville | Jessamine Female Institute |  |  | 2 | 6 |  | 0 | 6 | 6 |
| Owensboro | Owensboro Female College. | 3 |  |  |  |  | 0 | 50 | 50 |
| Richmond | Central University .-.......- | 88 |  |  | 35 | 65 | 21 | 25 | 46 |
| Winchester | Kentucky Wesleyan College |  |  | 10 |  | 17 | 12 | 5 | 17 |
| LOUTSTANA. |  |  |  |  |  |  |  |  |  |
| Keatchie. | Keatchie Male and Female College. |  | 1 |  |  |  |  |  |  |
| New Orleans | College of the Immaculate Conception. |  | 142 | 142 |  |  |  |  |  |
| Do | Leland University |  | 34 |  |  |  |  |  |  |
| Do | New Orleans University | 31 | 42 |  | 23 |  | 0 | 24 | 24 |
| I) | Straight University ... | 20 | 20 | 12 | 10 | 12 | 12 | 16 | 28 |
| matne. |  |  |  |  |  |  |  |  |  |
| Kents Hill | Maine Wesleyan Female College. | 8 | 9 |  | 25 | 8 | 0 | 10 | 10 |

a Has a pedagogical department.

Table 18.-Colleges and universities reporting students in teachers training courses--Continued.


Table 18.-Colleges aind universities reporting students in teachers' training courses-Continued.

a Has a pedagogical department.

Table 18.-Colleges and universities reporting students in teachers' training courses-Continued.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow{3}{*}{Location.} \& \multirow{3}{*}{Institution.} \& \multicolumn{8}{|c|}{Normal students.} \\
\hline \& \& \multirow[b]{2}{*}{1895.} \& \multirow[b]{2}{*}{1896.} \& \multirow[b]{2}{*}{\(189 \%\).} \& \multirow[b]{2}{*}{1898.} \& \multirow[b]{2}{*}{1899.} \& \multicolumn{3}{|c|}{1900.} \\
\hline \& \& \& \& \& \& \& Male. \& Female \& Total. \\
\hline \multicolumn{10}{|l|}{NEW YORKcont'd.} \\
\hline New York \& \multirow[t]{3}{*}{Manhattan College........... New York University University of Rochester Syracuse University} \& \multirow{3}{*}{81} \& \multirow[b]{2}{*}{100} \& \multirow[t]{2}{*}{\(\begin{array}{r}4 \\ 138 \\ \hline\end{array}\)} \& \multirow[b]{3}{*}{\[
\begin{gathered}
182 \\
21 \\
72
\end{gathered}
\]} \& \multirow[t]{3}{*}{\[
\begin{array}{r}
26 \\
346 \\
26 \\
35
\end{array}
\]} \& 28 \& 0 \& 28 \\
\hline Do - \& \& \& \& \& \& \& 85 \& 141 \& 18 \\
\hline Rochester Syracuse \& \& \& \& \& \& \& 18
40 \& 0
68 \& 18 \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
north Carolina. \\
Chapel Hill
\end{tabular}} \& \& \& \& \& \& \& \& \& \multirow[b]{2}{*}{61} \\
\hline \& \multirow[t]{2}{*}{University of North Carolina (public).} \& \multirow[t]{2}{*}{\[
\begin{aligned}
\& 59 \\
\& 30
\end{aligned}
\]} \& 39 \& 21 \& \& \multicolumn{2}{|r|}{60} \& 1 \& \\
\hline Charlotte \& \& \& 20 \& 41 \& 37 \& 37 \& 49 \& 0 \& 49 \\
\hline Hickory-- \& Claremont College \& \& 4 \& 35 \& 8 \& 18 \& 0 \& 20 \& 20 \\
\hline Louisburg \& Louisburg Female College - \& \& \& 35 \& 20 \& 10 \& \& \& \\
\hline Mars Hill -.... \& Mars Eill College ..... \({ }^{\text {Chowal }}\) Baptist Female \& \& 50 \& 3 \& 3 \& 44 \& 0 \& 4 \& 4 \\
\hline \& stitute. \& \& \& 3 \& ) \& 4 \& 0 \& 4 \& \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Raleigh \\
Salisbury
\end{tabular}} \& \multirow[t]{2}{*}{Shaw University Livingstone College} \& \multirow[t]{2}{*}{\[
\begin{array}{r}
175 \\
53 \\
\hline
\end{array}
\]} \& \multirow[b]{2}{*}{22} \& \& \multirow[t]{2}{*}{\[
\begin{array}{r}
190 \\
33
\end{array}
\]} \& \multirow[t]{2}{*}{\[
\begin{aligned}
\& 173 \\
\& 113
\end{aligned}
\]} \& \multirow[t]{2}{*}{\[
\frac{52}{35}
\]} \& \multirow[t]{2}{*}{119
40} \& \multirow[t]{2}{*}{171

$\%$} <br>
\hline \& \& \& \& \& \& \& \& \& <br>
\hline north dakota. \& \& \& \& \& \& \& \& \& <br>
\hline Fargo - \& \multirow[t]{2}{*}{Fargo College University of North Dakota (public).} \& \multirow[t]{2}{*}{12
8} \& \multirow[t]{2}{*}{20} \& \& \multirow[b]{2}{*}{80} \& \multirow[t]{2}{*}{25} \& \multirow[b]{2}{*}{8} \& \multirow[b]{2}{*}{15} \& \multirow[t]{2}{*}{3} <br>
\hline University ohio. \& \& \& \& 12 \& \& \& \& \& <br>
\hline Akron \& Buchtel College \& 19 \& \multirow[t]{2}{*}{} \& \multirow[t]{2}{*}{7} \& \multirow[t]{2}{*}{11} \& \multirow[t]{2}{*}{${ }_{53}^{7}$} \& \multirow[b]{2}{*}{60} \& \multirow[b]{2}{*}{25} \& \multirow[b]{2}{*}{85} <br>
\hline Alliance \& Mount Union College --....- \& ${ }_{7} 8$ \& \& \& \& \& \& \& <br>

\hline Athens \& Ohio University (public) $a_{\text {_- }}$ \& \multirow[t]{2}{*}{11} \& \multirow[t]{2}{*}{15} \& \[
$$
\begin{aligned}
& 50 \\
& 20
\end{aligned}
$$

\] \& \multirow[t]{3}{*}{\[

$$
\begin{aligned}
& 20 \\
& 20 \\
& 20 \\
& 44
\end{aligned}
$$
\]} \& \multirow[t]{2}{*}{} \& \multirow[t]{2}{*}{1} \& \multirow[t]{2}{*}{8} \& <br>

\hline Cleveland \& Western Reserve Universiö \& \& \& \& \& \& \& \& 9 <br>
\hline Columbus \& Ohio State University (pub- \& \& \& \& \& 53 \& \& \& <br>

\hline efiance \& lic). \& \& \multirow[b]{3}{*}{$$
\begin{gathered}
39 \\
29 \\
29 \\
107
\end{gathered}
$$} \& \multirow[t]{2}{*}{128} \& \& \multirow[t]{2}{*}{\[

$$
\begin{array}{r}
119 \\
19
\end{array}
$$
\]} \& \multirow[t]{2}{*}{67} \& \multirow[b]{2}{*}{79} \& <br>

\hline Delaware \& Ohio Wesleyan University \& 59 \& \& \& \& \& \& \& 146 <br>
\hline Findlay \& Findlay College .-...-- \& 62 \& \& 43 \& 38 \& 36 \& 9 \& 14 \& 23 <br>

\hline Glendale \& Glendale Female College \& \& 107 \& \multirow{3}{*}{${ }_{4}^{2}$} \& \& \multirow[t]{3}{*}{$$
\begin{array}{r}
6 \\
75
\end{array}
$$} \& \multirow[t]{2}{*}{1} \& \multirow[t]{2}{*}{7} \& \multirow[t]{2}{*}{} <br>

\hline Himam \& Hiram College \& \multirow[t]{2}{*}{74} \& 2 \& \& \multirow[t]{2}{*}{86} \& \& \& \& <br>
\hline Mariett \& Marietta Col \& \& 6 \& \& \& \& \multirow[t]{2}{*}{1} \& 31
1 \& \multirow[t]{2}{*}{$\stackrel{5}{2}$} <br>

\hline New Conc \& Muskingum Colle \& \multirow[t]{2}{*}{10} \& \multirow[t]{2}{*}{15} \& \multirow[t]{2}{*}{--.---} \& \multirow[t]{2}{*}{$$
\begin{array}{r}
3 \\
24 \\
24
\end{array}
$$} \& \& \& \multirow[b]{3}{*}{113} \& <br>

\hline Oberlin \& Oberlin College. \& \& \& \& \& \multirow[t]{2}{*}{18} \& \multirow[b]{2}{*}{0} \& \& \multirow[t]{2}{*}{17} <br>
\hline Oxford.- \& Western College for Women \& \& \& \& \& \& \& \& <br>
\hline Richmond \& Richmond College \& \& \& \& 35 \& \& \& \& <br>
\hline Scio -- \& Scio College - .-.... \& \& \multirow[t]{2}{*}{19} \& \multirow[t]{5}{*}{73
24

83} \& \multirow[t]{5}{*}{$$
\begin{aligned}
& 84 \\
& 84 \\
& 84 \\
& 38 \\
& 38
\end{aligned}
$$} \& \multirow[t]{5}{*}{\[

$$
\begin{aligned}
& 10 \\
& 38 \\
& 21 \\
& 33 \\
& 28
\end{aligned}
$$

\]} \& \multirow[t]{5}{*}{$\begin{array}{r}4 \\ 16 \\ 13 \\ 23 \\ \hline-\end{array}$} \& \multirow[t]{5}{*}{\[

$$
\begin{gathered}
10 \\
11 \\
3 \\
60
\end{gathered}
$$
\]} \& \multirow[t]{6}{*}{$\begin{array}{r}14 \\ 27 \\ 16 \\ 83 \\ \hdashline----\end{array}$} <br>

\hline Tiffin .-. \& Hieidelberg University \& 10 \& \& \& \& \& \& \& <br>
\hline Westerville \& Otterbein University \& \& 14 \& \& \& \& \& \& <br>
\hline Wilberforce \& Wilberforce University \& 107 \& 107 \& \& \& \& \& \& <br>
\hline Wooster \& University of Wooster \& \& 33 \& \& \& \& \& \& <br>
\hline Yellow Springs. \& Antioch College \& 76 \& 40 \& 26 \& \& \& \& \& <br>
\hline oklahoma. \& \& \& \& \& \& \& \& \& <br>
\hline Stillwater \& \multirow[t]{2}{*}{Oklahoma Agricultural and Mechanical College (public).} \& \multirow[t]{2}{*}{} \& \multirow[t]{2}{*}{-. ---} \& \multirow[t]{2}{*}{} \& \multirow[t]{3}{*}{9} \& \multirow{4}{*}{29} \& \multirow{4}{*}{2} \& \multirow{4}{*}{20} \& \multirow[t]{4}{*}{22} <br>
\hline OREGON. \& \& \& \& \& \& \& \& \& <br>
\hline Albany \& Albany College \& \multirow{5}{*}{16
31} \& \& \& \& \& \& \& <br>
\hline McMinnville \& McMinnville College \& \& \& \multirow{4}{*}{$\begin{array}{r}9 \\ 34 \\ \hline\end{array}$} \& \multirow{5}{*}{60
29
81} \& \& \& \& <br>

\hline Philomath \& Philomath College \& \& \multirow[t]{3}{*}{$$
\begin{gathered}
39 \\
55 \\
\hline
\end{gathered}
$$} \& \& \& \multirow[t]{3}{*}{\[

$$
\begin{aligned}
& 30 \\
& 24 \\
& 25
\end{aligned}
$$
\]} \& \multirow[t]{2}{*}{4

4

4} \& \multirow[t]{2}{*}{$$
\begin{gathered}
-8 \\
29 \\
29
\end{gathered}
$$} \& \multirow[t]{2}{*}{--72

33} <br>
\hline Salem ------ \& Willamette University \& \& \& \& \& \& \& \& <br>
\hline University Park.- \& Portland University \& \& \& \& \& \& \& \& <br>
\hline pennsylvania. \& \& \& \& \& \& \& \& \& <br>

\hline Allentown \& \multirow[t]{11}{*}{| Allentown College for Women. |
| :--- |
| Muhlenberg College |
| Lebanon Valley College |
| St. Vincent's College |
| Bryn Mawr College |
| Ursinus College |
| Lafayette College |
| Pennsylvania College |
| Thiel College |
| Juniata College. |
| Franklin and Marshall College. |} \& \& 34 \& \multirow[t]{2}{*}{----} \& \& \multirow[t]{3}{*}{25} \& \& \& <br>

\hline \& \& \multirow[t]{2}{*}{.--.--} \& \& \& \multirow[t]{2}{*}{} \& \& \multirow[t]{2}{*}{25} \& \multirow[b]{2}{*}{0} \& \multirow[t]{2}{*}{25} <br>

\hline Annville \& \& \& \multirow[t]{3}{*}{$$
\begin{aligned}
& 20 \\
& 11 \\
& 24
\end{aligned}
$$} \& \[

$$
\begin{aligned}
& 15 \\
& 10
\end{aligned}
$$
\] \& \& \& \& \& <br>

\hline Beatty \& \& 6 \& \& \& ----- \& \& 23 \& \multirow[t]{4}{*}{0
0
5
2} \& \multirow[t]{4}{*}{} <br>

\hline Bryn Mawr \& \& \multirow[b]{3}{*}{27} \& \& \multirow[t]{3}{*}{$$
\begin{gathered}
21 \\
7 \\
7 \\
20 \\
11 \\
-\cdots
\end{gathered}
$$} \& \multirow[t]{3}{*}{} \& \multirow[t]{3}{*}{} \& \multirow[t]{3}{*}{21} \& \& <br>

\hline Collegeville \& \& \& \multirow[t]{2}{*}{-... 9} \& \& \& \& \& \& <br>
\hline Easton \& \& \& \& \& \& \& \& \& <br>
\hline Gettysburg \& \& \multirow[t]{4}{*}{} \& \multirow[t]{4}{*}{15
12

-----} \& \multirow[t]{4}{*}{| 20 |
| ---: |
| 11 |
| $-\cdots---$ |
| - |} \& \multirow[t]{4}{*}{} \& \multirow[b]{4}{*}{8

25
15} \& \multirow[t]{4}{*}{8
8
40
12} \& \multirow[t]{4}{*}{9
9
20
0} \& \multirow[t]{4}{*}{17
8
60
12} <br>
\hline Greenville \& \& \& \& \& \& \& \& \& <br>
\hline Huntingaion \& \& \& \& \& \& \& \& \& <br>
\hline Lancaster ${ }^{\circ}$ \& \& \& \& \& \& \& \& \& <br>
\hline
\end{tabular}

a Has a pedagogical department.

TABLE 18.-Colleges and universities reporting students in teachers' training courses-Continued.

( Has a pedagogical department.

Table 18.-Colleges and universities reporting students in teachers' training courses-Continued.


Table 19.-Statistics of public


[^119]normal schools，1899－1900．

| Students． |  |  |  | Chil－ dren in model school． |  | Col－ ored stu－ dents in nor－ mal cour＇se． |  | Gradu－ ates from nor－ mal course． |  |  | $\text { :xeo } \text { [OOq̧əs u! syəo } M$ | Volumes in library． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| In bus－ iness course． |  | $\begin{gathered} \text { In } \\ \text { high- } \\ \text { school } \\ \text { grades. } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\stackrel{\text { ® }}{\substack{\text { cis }}}$ |  |  |  | $\stackrel{\dot{9}}{\stackrel{y}{c}}$ |  |  |  | $\begin{aligned} & \text { 品 } \\ & \text { 永 } \end{aligned}$ |  |  |  |  |  |  |  |  | $\begin{gathered} \text { s } \\ \text { 㞼 } \end{gathered}$ |  |  |
| 1：3 | 且 4 | 且5 | 16 | 189 | 18 | 19 |  | 9 ${ }^{\text {夏 }}$ | 122 | 43 | S $\square^{4}$ | 18 | 96\％ | 98 | 28 | 29 |  |
| 0 |  |  | 2 | 25 | 25 | 0 0 | 0 0 | 10 0 0 | 26 0 16 | 4 4 4 | 36 36 36 | 1,000 300 0 | 350,000 15,000 | $\$ 7,500$ 3,050 2,500 | $\begin{array}{r} \$ 13,550 \\ 4,050 \\ 2,988 \end{array}$ | 0 0 | 1 2 3 |
| 25 |  | 4 | 7 | 10 | 15 | 78 | 115 | 15 | 14 | 4 | 36 | 3， 083 |  | 4，000 | 15，225 |  | 4 |
|  |  |  |  | 161 | 156 |  |  | 8 | 3 13 | 4 | 36 40 | 400 | 20,000 20,000 | 1,500 5,000 | 2，900 | \＄1，800 | 5 |
| 0 | 0 | 15 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 40 | 40 | 35,000 | 5，000 | 5， 503 | 10，000 | 7 |
|  |  |  |  | 0 |  | 0 | 0 | 0 | 0 | 4 | 40 | 2，200 | 80,000 | 10，000 | 10，800 | 3,000 | 8 |
|  |  |  |  |  |  | 36 | 26 |  |  | 4 | 40 | 4，160 | 80，500 | 3，500 | 10，8：2 | 660 | 9 |
| 0 |  | 7 | 33 | 88 | 166 | 0 | 0 | 49 | 279 | 4 | 40 | 10，070 | 140， 000 | 31， 780 | 31， 098 |  | 10 |
|  |  |  |  | $17 \%$ | 176 | 1 | 0 | 11 | 103 | 4 | 40 | 7，515 | 189， 000 | 53， 250 | 54， 337 | 20，000 | 11 |
| 0 |  | 0 | 0 | 88 | 112 | 0 | 0 | 3 | 2\％ | 4 | 40 | 2，080 | 76，500 | 28，150 | 28， 150 | $45,0 \leq 0$ | 12 |
|  |  |  |  | 100 | 171 | 0 | 0 | 9 | 150 | 1 | 40 | －7，000 | 193，5？6 | 54，500 | 54，500 | 1，500 | 13 |
|  |  |  |  |  |  | 110 | 121 | 11 | 59 | 2 | 38 | 1，500 | 200，000 | 35,000 | 37,490 |  | 14 |
| 0 |  |  |  |  |  | 0 | 0 |  |  | 2 |  | 800 | 79，2＞2 | 10̌，234 | 15，234 |  | 15 |
|  |  |  |  | \％$\% 00$ | 800 |  |  | 0 | 78 | 2 | 40 | 15，000 |  |  |  |  | 16 |
| 0 |  |  |  | 300 | 300 | 0 0 | 0 0 | 0 0 |  | 2 | 40 40 | $\begin{aligned} & 8,498 \\ & 6,000 \end{aligned}$ | 150， 009 |  |  |  | 17 18 |
| 0 |  |  |  | 125 | 100 | 0 | 0 | 0 | 15 | 1 | 40 |  |  |  |  | 0 | 19 |
| 0 |  | 0 | 0 | $\begin{aligned} & 210 \\ & 16: \end{aligned}$ | $\begin{aligned} & 204 \\ & 17 \% \end{aligned}$ | 17 | 92 | 0 8 | $\begin{aligned} & 53 \\ & 37 \end{aligned}$ | $\stackrel{2}{2}$ | .38 40 | 745 | 1，200 |  |  |  | 20 21 |
| 0 |  |  | 0 | 9 | 9 | 0 | 0 | $\because$ | 2 | 4 | 32 | 300 | 12，000 | 7，000． | 7，093 |  | 22 |
|  |  | 48 | 62 | 18 | 22 | 7 | 21 | 0 | 0 |  |  | 778 | 30， 044 | 6，500 | 19，478 |  | 23 |
| 0 |  | 0 | 0 | 12 | 21 | 0 | 0 | 0 | 0 | 2 | 40 | 0 | 50，000 | 16，000 | 17，000 | 0 | 21 |
| 0 | 80 | 0 | 70 | 0 | 120 | 0 | 0 | 0 | 16 | 4 | 95 | 2，000 | 19å， 000 | 20，500 | 26，200 | 950 | 25 |
| 0 |  |  |  | 0 | 0 | 0 | 0 | 5 | 4 | 4 | 40 | 2，000 | 25． 000 | 7，000 | 7，003 | 0 | 26 |
| 0 | 0 | 0 | 0 | 7 | 11 | 0 | 0 | 4 | 19. | 4 | 40 | 2， 450 | 43， 000 | 7，500． | 7，500 | 6，000， | 27 |

Table 19.-Statistics of public normal

schools，1899－1900－Continued．

| Students． |  |  |  | Chil－ drenin model scinool． |  | Col－ ored stu－ dents in nor－ mal course． |  | Gradu－ ates from nor－ mal course． |  |  |  |  |  |  | $\begin{aligned} & \text { Total income for the year } \\ & 1899-1500 . \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| In bus－ iness course． |  | $\begin{aligned} & \text { In } \\ & \text { high- } \\ & \text { schcol } \\ & \text { grades. } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 㳫 |  | $\underset{\underset{\sim}{\text { ® }}}{\substack{\text { ® }}}$ |  | $\underset{\text { 㝝 }}{\stackrel{y}{4}}$ | 寅 |  |  | $\stackrel{\dot{8}}{\stackrel{\text { ® }}{3}}$ |  |  |  |  |  |  |  |  | $\underset{\underset{\sim 1}{\text { cu}}}{\stackrel{\text { cu}}{2}}$ |  |  |
|  | 且星 | 15 | 16 | 17 | 18 | 面（3） | 30 | 发县 | 存吸 | 93 | 次 $\frac{1}{}$ | 85 | \＄9 |  | 98 | 33 |  |
|  |  | 75 | $7 \sim$ | 95 |  | 6 | 5 | 8 | 9 | 4 | 39 | 15， 106 | \＄315， 000 | \＄33，216 | \＄36，416 |  | 28 |
|  |  |  |  | 378 | 387 | 0 | 1 |  |  | 2 | 40 | 12，000 | 1，250，000 | 40，000 | 40，000 | \＄：0，000 | 29 |
|  |  |  |  | 132 | 104 |  |  | 3 | 13 | 4. | 42 | 7，000 | 250，000 | 33,000 | $31,0 \pm 0$ |  | 30 |
|  |  | 14 |  | $14 \%$ | 131 | 0 |  | 31 | 38 | 4 | 39 | 15，000 | 336，000 | 33,000 | 46,241 | 5， 380 | 31 |
| 0 | 0 0 | 0 |  | 102 | 123 |  | 3 | 0 | 18 | 2 | 40 39 | 30， 000 | 350,000 | 65，000 | 70， 000 | 0 | 32 33 |
| 25 | 0 | 3 |  | 3 | 127 |  |  | 61 | 0 112 | 4 4 2 3 | 37 40 40 | 200 10,500 200 200 | 130,000 12,000 25,000 | 50 44,50 2,300 | 900 66,724 3,100 800 | 50， 000 | 34 35 35 37 |
|  |  | 36 |  |  |  |  |  | 1 | 16 | 2 | 36 | 111 | ${ }^{\prime}, 800$ | 5，200 | 5，600 |  | 88 |
|  |  | 38 | 250 | 95 | 116 | 5 | 8 | 2 S | 83 | 3 | 39 | 14，500 | 200，000 | 35， 000 | 51，150 | 20，503 | 39 |
|  |  | 15 | 20 |  |  | 0 | 0 | 5 | 4 |  |  |  | 4，000 | 700 | 2， 000 |  | 180 |
| 0 | e | 0. | O | 0 | 0 | 60 | $5 \sim \sim$ | 43 | 39 | 3 | 40 | 700 | 25，000 | 3，000 | 6，787 |  | 41 |
| 1 | 1 |  |  | 169 | 120 |  |  | 1 | 29 | 2 | 40 | 300 |  |  |  |  | 4.8 43 |
| 0 | 0 |  |  | 52 | 70 | 0 | 0 | 6 | 42 | 4 | 32 | 3，161 | \％5， 000 | 16，000 | 21，511 | 1，500 | 44 |
|  |  |  |  | 10 | 15 |  |  | 12 | 54 | 2 | 38 | 1，000 | 50,000 | 10，000 | 10，700 | 500 | 16 |
| 0 | 0 | 0 |  | 40 | 52 | 0 | 0 | 8 | 44 | 2 | 38 | 3，401 | 75， 503 | 9，100 | 9，800 | 500 | $4 \pi$ |
|  |  |  |  |  |  | 0 | 0 | 40 | 68 | 4 | 38 | ， 375 | 10，000） | 2，500 | 2， 710 | 4，${ }^{0}$ | 48 |
|  |  |  |  | 60 | 90 | 0 | 3 | 6 | $5 \%$ | 3 | 39 | 2，698 | 78， 000 | 9， 400 | 10，697 | 4，606 | 45 |
| 2 | －－－ | 21 | 23 |  |  |  |  | 0 |  | $\stackrel{2}{3}$ | 33 22 | 116 500 | 4,300 5,000 | 1,000 750 | 1,649 1,290 |  | 50 51 |
| 0 | 0 | 0 | 0 | 9 | 23 | 0 | 0 | 6 | 92 | 3 | 38 | 4，200 | 160， 000 | 20，000 | 27,071 | 4，504 | 52 |
| 0 | 0 | 0 |  |  |  | 0 | 2 | 0 | 106 | 2 | 40 | 3，000 |  |  |  |  | 53 |
| 0 | 0 | 0 | 0 |  | －－ | 0 | 1 | 12 | 34 | 4 | 38 |  |  |  |  |  | อั4 |
| 0 | 0 | 0 |  | 213 | 229 | 0 | 1 | 15 | 96 | 4 | 38 | 6，974 | 432， 000 | 41，473 | 41， 533 | 5，700 | 55 |
| 0 | 0 | 0 |  | $47 \%$ | 452 | 0 | 0 | 0 | 14 | 1 | 40 | 300 | 50， 300 |  |  |  | 56 |
| 0 | 0 | 0 | 0 | 335 | 291 | 0 | 0 | 2 | 50 | 2 | 38 | 3，500 | 200， 000 | 3ั， 861 | 35， 961 | 40， 000 | 57 |
| 0 | 0 | 0 |  | 63 | 50 | 0 230 | 0 300 | 0 | 58 | 2 | 38 40 | 3，300 | 250，000 | 28，853 | 25， 853 | 863 | 58 59 |

Table 19.-Statistics of public normal


* Statistics of 1893-99.
schools, 1899-1900-Continued.


Table 19.-Statistics of public normal

schools, 1899-1900-Continued.


Table 19.-Statistics of public normal

schools, 1899-1900-Continued.


Table 19.-Statistics of public normal


[^120]a See table of Colleges and Universities.
schools, 1899-1900-Continued.


Table 20.-Statistics of private


[^121]normal schools, 1899-1900.


Table 20．－Statisties of private normal

|  | Location． | Name of institution． | Teachers． |  |  |  | Students． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Entire num－ ber em－ ployed． |  | In－struct－ing nor－malstu－dents． |  | Entire number enrolled． |  | Below normal and high school grades． |  | In nor－ mal course． |  |
|  |  |  | 㡙 |  |  |  |  |  | $\frac{\stackrel{\bullet}{\mathbb{B}}}{\stackrel{\text { B }}{4}}$ | － | $\underset{\underset{\sim}{c}}{\stackrel{\circ}{c}}$ | 砣 |
|  | 12 | $\mathfrak{2}$ | 8 | 4 | 5 | 6 | ＇ | 8 | 9 | 1 1） | 1直 | 12 |
|  | INDIANA． |  | 11501441 | 33 | 2 | 0 | 400 |  |  |  | 100 |  |
| 27 | Angola． | Tri－State Normal School |  |  |  |  |  |  |  |  |  |  |
| 28 | Corydon | The Ohio Valley Normal College． |  |  |  |  | 155 | 48 | － | 0 |  | 45 |
| 29 | Covington | Indiana Normal College．．．－ |  | 2 | 0 |  | 25 | 26 |  |  | 25 | 26 |
| 30 | Danville | Central Normal College－．．． |  | 2 | 14 | 2 | $42 \%$ | $2 \because 8$ |  |  | 376 | 219 |
| 31 | Elkhart． | Elkhart Normal School and Business College．＊ |  |  | 1 | 1 | 78 | 78 | 13 | 4 | 5 | 3 |
| 32 | Indianapolis ．．．．． | Indiana Kindergarten and Primary Normal Training School． |  | 15 | 1 | 11 | 0 | 111 | 0 0 | 0 | 0 | 111 |
| 33 | Marion | Marion Normal College．．．．－ | 166 | 53 | 11 | 33 | 850 | $\begin{aligned} & 763 \\ & 2: 3 \end{aligned}$ | $369$ | 56 | 126 | 11.5 |
| 34 | Mitchell | Southern Indiana Normal College． |  |  |  |  | 210 |  |  |  | 210 | $2 \% 0$ |
| 35 | Muncie | Eastern Indiana Normal University． | 13 | 5 | ${ }^{7}$ |  | 301 | 244 |  |  | 150 | 116 |
| 36 | Rochester | Rochester Normal Univer－ sity． | $\uparrow$ | 3 | 5 | 3 | 140 | 112 |  |  | 80 | $\%$ |
| 37 | Valparaiso．$-\ldots-{ }^{\text {P }}$ IOWA． | Northern Indiana Normal School．\％ | 40 | 15 | 30 | 11 | 2， 141 | 1，210 | 49 |  | 1，143 | 784 |
| 38 | Bloomfieid | Southern Iowa Normal School． | 4 | 4 | 4 | 1 | 171 | 141 | 40 | 35 | 86 | 20 |
| 39 | Denison | Denison Normal School and Business College． | 5 | 2 | 3 | 1 | 175 | 150 | 0 | 0 | 100 | 75 |
| 40 | Humboldt | Humboldt College－－．．．．．．．．－ | 9 | 15 | 4 | 7 | 290 | 132 | 60 | 50 | 70 | 40 |
| 41 | Le Mars | Le Mars Normal College－．－ | 6 | 4 | 4 | 2 | 75 | 80 |  |  | 75 | 80 |
| $4 \%$ | Newton ．－．－．－．．－ | Newton Normal College＊－－ | 3 | 2 | 2 | 1 | 67 | 65 | 0 | 0 | 37 | 4？ |
| 43 | Ottumwa | Ottumwa Normal School \％ | 0 | 1 | 0 | 1 | 1 | 13 |  |  | 1 | 13 |
| 44 | Perry | Perry Normal College | 3 | \％ | 2 | ， | 105 | 137 |  |  | 51 | 10.3 |
| 45 | Shenandoah | Western Normal Coilege．．－ | 19 | 4 | 19 |  | 783 | 423 |  |  | $53 \%$ | 365 |
| 46 | Vinton－－－－－－－－－ | Tilford Collegiate Academy | 4 | 3 | 4 | 2 | 200 | 135 | 70 | 60 | 50 | ${ }^{6} 0$ |
| 47 | Waukon． kansas． | Waukon Business College and Normal School． | 2 | －1 | 2 | 0 | 43 | $5 \%$ |  |  | 8 | 20 |
| 48 | Conway Springs | Normal and Business Col－ lege． | 2 | 2 | 1 | 1 | 32 | 43 | 2 | 3 | 10 |  |
| 49 | Great Bend．．．．．． | Central Normal College ．．．－ | 8 | 6 | 8 | 4 | 108 | 138 |  |  | 68 | $7 \%$ |
| 50 | McPherson | McPherson College ．－．．．．．．－－ | 12 | 4 | 8 | 3 | 195 | 105 | 60 | 40 | 35 | 23 |
| 51 | Mary ville | Modern Normal College ．．．－ | 3 | 3 | 3 | 3 | 96 | 84 | 0 | 0 | 45 | 48 |
| 52 | Nickerson | Nickerson Normal College．－ | 8 | 10 | 2 | 2 | 162 | 140 | 20 | 31 | 30 | 47 |
| 53 | Winfield KENTUCKY． | Southwest Kansas College．－ | 13 |  | 4 12 | ． | 170 | 124 | 0 | 0 | 8 | 20 |
| 51 | Blaine－ | Blaine Normal School | 2 | 1 | 2 | 0 | 50 | 25 | 10 | 10 | 40 | 1.5 |
| 50 | Bowling Green ．－ | Southern Normal School－－ | 9 | 4 | 4 | 3 | 420 | 280 | 12 | 1： | 158 | 21： |
| 56 | Hardinsburg ．．．－ | Breckenridge Normal College． | 4 | 3 | 2 | 1 | 60 | 82 |  | －．．－ | 60 | 82 |
| $5 \%$ | Lexington | Chandler Normal School ．－ | 0 | 9 | 0 | 3 | 80 | 140 | 68 | 11： | 12 | 23 |
| 58 | Madisonville．．．－ | Western Kentucky Normal School． |  | 2 | 0 | 1 | 14 | 40 | 13 | 16 | 0 | ${ }^{9}$ |
| 59 | Morehead | Morehead Normal School ．－ | 3 | 3 | $\stackrel{2}{2}$ | 1 | 56 | 59 | 25 | 24 | 21 | 20 |
| 60 | Waddy MARYLAND． | Central Normal College ．．．－ |  | 2 | 5 | 2 | 90 | 85 | 20 | 15 | 50 | 45 |
| 61 | Ammendale | Ammendale Normal Insti－ | 7 | 0 | ， |  | － 38 | 0 | 18 | 0 | 20 | 0 |
| 62 | Baltimore．．．．．．． | Baltimore Normal School <br> （colored）． | 1 | 1 | 1 | 1 | 12 | 37 |  |  | 12 | 37 |

schools, 1899-1900-Continued.


Table 20.-Statistics of private normal

schools, 1890-1900-Continued.


Table 20.-Statistics of private normal

schools, 1899-1900-Continued.


TABLE 20．－Siatistics of private normal

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \& \multirow{3}{*}{Location．} \& \multirow{3}{*}{Name of institution．} \& \multicolumn{4}{|c|}{Teachers．} \& \multicolumn{6}{|c|}{Students．} \\
\hline \& \& \& \multicolumn{2}{|l|}{\begin{tabular}{l}
Entire \\
num－ ber em ployed．
\end{tabular}} \& \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { In: } \\
\text { struct- } \\
\text { ing nor- } \\
\text { mal } \\
\text { stu- } \\
\text { dents. }
\end{gathered}
\]} \& \multicolumn{2}{|l|}{Entire number enrolled．} \& \multicolumn{2}{|l|}{\[
\begin{aligned}
\& \text { Below } \\
\& \text { normal } \\
\& \text { and } \\
\& \text { high } \\
\& \text { school } \\
\& \text { grades. }
\end{aligned}
\]} \& \multicolumn{2}{|l|}{\[
\begin{aligned}
\& \text { In nor- } \\
\& \text { mal } \\
\& \text { course. }
\end{aligned}
\]} \\
\hline \& \& \& \[
\frac{\stackrel{\rightharpoonup}{2}}{\stackrel{y}{c}}
\] \& － \&  \&  \& \[
\stackrel{\dot{9}}{\stackrel{y y y}{*}}
\] \&  \& 守 \& 运 \& 䳩 \& 感 \\
\hline \& 1 \& － \& 8 \& 4 \& 5 \& 3 \& 7 \& 8 \& 9 \& 160 \& 11 \& 内 \({ }^{\text {a }}\) \\
\hline \& TEXAS． \& \& \multirow{4}{*}{6} \& \multirow{4}{*}{\(\stackrel{2}{3}\)} \& \multirow{4}{*}{4} \& \multirow{4}{*}{0
13} \& \multirow{4}{*}{18.5} \& \multirow{4}{*}{238} \& \multirow{4}{*}{28} \& \multirow{4}{*}{14
190} \& \multirow{4}{*}{95
0} \& \multirow{4}{*}{33
45} \\
\hline 124 \& Commerce \& East Texas Normal College． \& \& \& \& \& \& \& \& \& \& \\
\hline 125 \& Crockett． \& Mary Allen Seminary ．－．．．． \& \& \& \& \& \& \& \& \& \& \\
\hline \& VIRGINIA． \& \& \& \& \& \& \& \& \& \& \& \\
\hline 126 \& Lawrenceville．－－ \& St．Paul Normal and Indus－ trial School．＊ \& \multirow[t]{6}{*}{\(1 \%\)

1
1
1
2} \& \multirow[t]{6}{*}{8
1
10
1} \& 3 \& \multirow[t]{2}{*}{1
0} \& \multirow[t]{2}{*}{150} \& \multirow[t]{2}{*}{168
35} \& \multirow[t]{2}{*}{44
35} \& 51 \& 8 \& 8 <br>
\hline 197 \& Reliance \& Shenandoañ Vormal College \& \& \& \％ \& \& \& \& \& 28 \& 4 \& 2 <br>
\hline 128 \& Richmond \& Hartshorn Memorial College \& \& \& 1 \& 10 \& 0 \& $1: 20$ \& 0 \& 59 \& 0 \& 61 <br>
\hline 129 \& Pockymount－－－ \& Piedmont Normal College ．－ \& \& \& 1 \& 1. \& 10 \& 25 \& \& 31 \& 10 \& 25 <br>
\hline 130 \& Stuart－．．．．－．．．．．． \& Stuart Normal College ${ }^{*}$ ．．．． \& \& \& 2 \& 1 \& 29 \& 78 \& 16 \& 31 \& 13 \& 47 <br>
\hline \& WEST VIRGINIA． \& \& \& \& \& \& \& \& \& \& \& <br>
\hline 131 \& Harpers Ferry－－ \& Storer College ．－．．．．．．．．．．．．． \& \multirow[t]{2}{*}{2} \& \multirow[t]{2}{*}{5
2} \& \multirow[t]{2}{*}{$\stackrel{2}{2}$} \& 5 \& 56
60 \& 86 \& 18 \& 20 \& 38 \& 60 <br>
\hline 132 \& Summersville．．． \& Summersville Normal School． \& \& \& \& 0 \& 60 \& 45 \& ：5 \& \％1 \& 20 \& 14 <br>
\hline 133 \& Milwaukee \& \multirow[t]{2}{*}{National German－Ameri－ can Teachers＇Seminary． Catholic Normal School of the Holy Family．} \& \multirow[b]{2}{*}{7} \& \multirow[t]{2}{*}{7
0} \& \multirow[t]{2}{*}{\％
$\%$} \& \multirow[t]{2}{*}{0
0} \& \multirow[t]{2}{*}{84

72} \& \multirow[t]{2}{*}{$$
\begin{array}{r}
-104 \\
0
\end{array}
$$} \& \multirow[t]{2}{*}{$7 \%$} \& 80 \& \multirow[t]{2}{*}{12

30} \& \multirow[t]{2}{*}{24
0} <br>
\hline 134 \& St．Francis ．．．．． \& \& \& \& \& \& \& \& \& － \& \& <br>
\hline
\end{tabular}

＊Statistics of 189．－99．
schools, 1899-1900-Continued.


## CHAPTER XXXIX.

## STATISTICS OF SECONDARY SCHOOLS.

The total number of secondary students in institutions of all classes reporting to this Office for the scholastic year ending June, 1900, was 719,241 , or more than 4 per cent of the aggregate enrollment in all the schools and colleges of the United States which was $17,020,710$. There was a gain of 64,014 , or nearly 10 per cent, over the preceding year in the number of secondary students enrolled. The secondary students enumerated were distributed among eight classes of institutions as fiollows:

| Institutions. | Male. | Female. | Total. |
| :---: | :---: | :---: | :---: |
| Public high schools | 216,207 | 303, 044 | 519,251 |
| Public normalschools | 1,049 | 1,906 | 2,955 |
| Public universities and college | 6, 132 | 2,087 | 8.219 |
| Private high schools. | 50, 3817 | 50, 063 | 110, 6,615 |
| Private universities and colleges | 28, 68, | 19,384 | 48, 066 |
| Private colleges for wome | 5,588 | 13,817 3,933 | 13,817 9,521 |
| Total. | 317,209 | 402, 033 | 719,241 |

The enrollment of secondary students for the year 1899-1900 was almost 1 per cent of the total population, or 9,460 in every million of population. The number reported as enrolled is something less than the actual number of secondary students in the United States. In localities in most of the States where high schoois are not accessible there are many students pursuing secondary studies under the direction of teachers of the elementary schools. The 91,549 students in commercial schools are not here included.

Since 1890 the rate of increase of secondary students has been more rapid than the rate of increase in population. The number of secondary students in private institutions has about kept pace with the growth of population from year to year, while the number of such students in public institutions has increased from about 3,600 to the million in 1890 to over 7,000 to the million in 1900. The following table shows the remarkable growth in the number of secondary students in the past ten years:

Secondary students and per cent of population.

|  | In public institutions. |  | In private institutions. |  | In both classes. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year. | Secondary students. | Per cent of popizlation. | Secondary students. | Percent of population. | Secondary students. | Percent of рориlation. |
| 1889-90 | 221, 222 | 0.36 | 145,481 | 0.23 | 367,063 | 0.59 |
| 1890-91 | 22\%, 868 | . 35 | 147, 667 | . 23 | 370, 435 | . 58 |
| 1891-92 | 247,660 | . 38 | $15+429$ | . 24 | 402, 059 | . 69 |
| 1892-93 | 256, $6: 28$ | . 39 | 153, 792 | .23 | 410,420 | -68 |
| 1893-94 | 302,006 | . 45 | 178,352 | . 26 | 480, 358 | . 71 |
| 1,994-95 | 361,370 | . 53 | 178, 342 | . 26 | 539, 712 | . 79 |
| 1895-96 | 392, 729 | . 56 | 166,274 | . 23 | 559, 003 | . 79 |
| 1895-97 | 4.20, 459 | . 59 | 164, 445 | . 23 | 584, 904 | . 82 |
| 1897-98 | 459, 813 | . 63 | 166, 302 | . 23 | 626, 115 | . 85 |
| 1895-99 | 488,549 | . 66 | 163, 678 | . 23 | 655,2,27 | . 89 |
| 1899-1909 | 530, 225 | . 70 | 188,816 | . 25 | \%19,241 | . 95 |

The aggregate number of secondary students increased from 3fr, 003 in 1899-90 to $\mathbf{r} 19,241$ in 1899-1900, or nearly 96 per cent. The increase in the number of such students in public institutions was from 221,522 in 1889-90 to 530,425 in 1899-1900, or over 139 per cent, while the increase in the number of secondary students in private institutions was from 145,481 in 1889-90 to 188,816 in 1899-1900, or nearly 30 per cent. These figures for the United States and corresponding figures for each geographical division are given in the fo'lowing table:

Students receiving sccondary instruction in public and private high schools and acadenies and in preparatory departments of colleges and other institutions.

|  | 1889.90. |  |  | 1899-1900. |  |  | Per cent of increase. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public | Private. | Total. | Public. | Private. | Total. | Public. | Private. | Total. |
| United States | 221,522 | 145, 481 | 367,003 | 530,425 | 188, 816 | 719,241 | 139.45 | 29.79 | 95.98 |
| North Atlantic Division.. | 83,630 | 40,957 | 1221,587 | 171,460 | 54,8:3 | :20,283 | 1155.0\% | 33.86 | 85.64 |
| South Atlantic Division... | 12,459 | 22, 161 | 34,620 | 28,708 | 28,327 | 57,035 | 130.42 | 27.82 | 64.75 |
| South Central Division ... | 11,820 | 26,547 | 38,367 | 41,223 | 37, 400 | 78,628 | 248.80 | 40.88 | 104. 94 |
| North Central Division... | 105,58\% | 40, 85.5 | 146,437 | 258,005 | 56, 739 | 314,745 | 144.37 | 38.88 | 114.94 |
| Western Division......... | 8,031 | 14,961 | 22, 992 | 31,023 | 11,527 | 42,550 | 286.29 | a 22.95 | 85.06 |

$a$ Decrease.
The growth of secondary education is further indicated by the increase in the value of property owned by public and private high schools. In 1890 property to the value of $\$ 49,171,542$ was reporied by 2,257 of the 2,526 public high schools, while 1,334 of the 1,632 private high schools and a a ademies reported property to the value of $\$ 37,521,576$, making an aggregate of $\$ 36,693,118$ for the value of property owned by both classes of schools. In 1900 property to the value of $\$ 96,131,695$ was reported by 4,742 of the 6,005 public high schools, while 1,390 of the 1,978 private high schools and academies reported property to the value of $\$ 53,854,136$, making an aggregate of $\$ 149,955,136$ for the value of property owned by both classes. This was an increase of $\$ 03,292,713$ in ten years.

It has been found impracticable to collect complete statistics of secondary students in the preparatory departments of colleges and other institutions. such as the number of students pursuing certain studies, and certain other details. For this reason this chapter is devoted almost exclusively to the statistics of the 6,005 public high schools and the 1,978 private high schools, academies, and seminaries reporting directly to this Bureau for the year 1899-1900. The following table shows the remarkable growth of public and private high schools since 1889-90:

| Year reported. | Public. |  |  | Private. |  |  | Total. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools. | $\begin{gathered} \text { Teach- } \\ \text { ers. } \end{gathered}$ | Students. | Schools. | Teachers. | Students. | Schools. | Teachel's. | Students. |
| 1889-90. | 2,526 | 9,120 | 202,963 | 1,6\%\% | 7,209 | 94,931 | 4,158 | 16,329 | 297, 894 |
| 1890-91. | 2,771 | 8,270 | 211,596 | 1, \%14 | 6,231 | 98, 400 | 4,485 | 14,501 | 309,996 |
| 1891-9\%. | 3,035 | 9,564 | 239,556 | 1,550 | \%,093 | 100,739 | 4,585 | 16,657 | 340,295 |
| 1892-9:3. | 3,218 | 10, 141 | 254,023 | 1,575 | 7,199 | 102, 375 | 4,793 | 17, 340 | 235,398 |
| 1893-94 | 3,964 | 12, 120 | 289, 274 | 1,982 | 8,009 | 118, 645 | 5,946 | 20,129 | 407,919 |
| 1894-95. | 4,712 | 14, 122 | 350, 099 | 2,180 | 8,559 | 118, 347 | 6,892 | 23, 681 | 468, 446 |
| 1895-96. | 4,974 | 15, 700 | 380, 493 | 2,106 | 8,752 | 106, 654 | 7,080 | 24,452 | 487, 147 |
| 1895-97. | 5,109 | 16,803 | 409, 433 | 2,100 | 9,574 | 107, 633 | 7,209 | 26,383 | 517,066 |
| 1897-98 | 5,315 | 17, 941 | 449,600 | 1,990 | 9,357 | 105, 225 | 7,305 | 27,298 | 5354, 825 |
| 1898-92- | 5,495 | 18, 18 | 476,227 | 1,957 | 9,410 | 103,838 | 7,452 | 28,188 | 580, 065 |
| 1890-1900. | 6,005 | 20,372 | 519,251 | 1,978 | 10,117 | 110,797 | 7,983 | 30, 489 | 630,048 |

In 1889-90 there were 2,526 public high schools with 202,963 students, while in 1899-1900 the number of schools had increased to 6,055 and the number of students to 519,251 . This was an increase of nearly 138 per cent in the number of schools and nearly 156 per cent in the number of secondary students. Up to the middle of the decade there was an increase in the number of private high schools and academies, but after 1895 there was a small decrease annually until 1899-1900, when there was a small increase over the nreceding year and a considerable increase in the number of secondary students in these private institutions. In 1889-90 the public high schools had about 69 per cent of the number of students and the private high schools about 32 per cent, while in 1899-1900 the former had over 82 per cent and the latter less than 18 per cent of the secondary students. The relative progress of public and private high schools since 1889-90 is shown in the following table, which gives the proportion of the number of schools, tea hers, and students of the two classes:

| Year reported. | Per cent of number of schools. |  | Per cent of number of teachers. |  | Per cent of num. ber of students. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public. | Private. | Public. | Private. | Public. | Private. |
| 1889-90 | 60.75 | 39.25 | 55.85 | 44.15 | 68.13 | 31.87 |
| 1890-91 | 61.78 | 38.20 | 57.03 | 42.97 | 68.26 | 31.74 |
| 1891-92 | 66.19 | 33.81 | 57.42 | 42.58 | 70.40 | 29.60 |
| 189\%-93 | 66.23 | 33. 77 | 60.25 | 39.75 | 70.78 | 29.2\% |
| 1893-94 | 66.67 | 33.33 | 60.21 | 39.79 | 70.91 | 29.03 |
| 1891-95 | 68.37 | 31.63 | 62.26 | 37.74 | 74.74 | 25.26 |
| 1895-96 | 70.25 | 29.75 | 64.21 | 35.79 | 78.11 | 21.89 |
| 1896-97 | 70.87 | 29.13 | 63.71 | 36.29 | 79.18 | 20.8\% |
| 1897-98 | 72.76 | 27.24 | 65.72 | 34.28 | 81.03 | 18.97 |
| 1898-99 | 73.74 | 26.26 | 66.55 | 33.45 | 82.10 | 17.90 |
| 1899-1900 | 75.28 | 24. 78 | $66.8 \%$ | 33.18 | $8 \% .41$ | 17.59 |

## Public High Schools.

Tables 1 to 15 in this chapter summarize the statistics of the public high schools reporting to this Office, while the information concerning each school is given in detail in Table 42.

For the scholastic year 1899-1900 there were 6,005 public high schools reporting to this Office, a gain of 510 over the preceding year. The number of these schools reported as departments of public systems was 5,758 , while only 268 were reported as independent. These are generally outside the cities or villages. Of the number belonging to city or village systems 691 are in cities which have 8,000 population or over.

As shown in Table 1, there were 20,372 teachers instructing secondary students in the problic high schools, the number of men being $10,1 \% 2$ and the number of women 10,200. This was an increase of 1,654 in the number of teachers over the preceding year. It is shown in the same table that the public high schools had 519,251 secondary students, 216,207 males and 303,044 females, a gain of $43,034 \mathrm{in}$ the total number. The male students comprised 41.64 per cent of the whole number, and the female students 58.36 per cent.

Of the total number of students in the public high schools of the United States, 254,816 , or nearly 50 per cent, are found in the 3,163 schools of the North Central Division. The 1,448 public high schools of the North Atlantic Division had 169,405 secondary students, the 675 schools of the South Central had 39,609, the 449 schools of the South Atlantic had 27,013, and the 270 schools of the Western Division had̉ 28,348 secondary students.

In the total number of students reported, there were included 8,395 colored secondary students. Of this number only 4,393 were in the colored high schools of the two Southern divisions, while the other divisions had 4,002. In the colored high schools of Missouri, a former slave State, there were 682 secondary students. If this number be subtracted from the North Central Division and added to the total in the two Southern divisions the number would be $5,0 \% \mathrm{~s}$ for the Southern and 3,320 for the other sections of the United States.

## STUDENTS AND COURSES OF STUDY.

The number of secondary studenis in classical and scientific courses known to be preparing for college, the number of graduates in 1900, the number of college preparatory students in the graduating classes, and the number of public highschool students in military drill, are shown in Table 2. The number preparing for college was 56,202 , or 10.82 per cent of the whole number. The number of graduates was 61,737 , or 11.89 per cent of the total enrollment. The number of graduates prepared for colleze was 18,693 , or 30.28 per cent of the total number of graduates for the year. The number of students in military drill was 10,455, an increase of only 59 over the preceling year.

The table which follows is a synopsis of the sum maries exhibited in tables 2 to 11. The per cent of male students preparing for college was 13.44 , and the per cent of female students 8.95. Over 10 per cent of the male students enrolled and nearly 13 per cent of the female students graduated in 1900. The per cent of male graduates who had prepared for college was 33.06 , and the per cent of female graduates 25.\%9.

Students in certain courses and studies in public high schools.

| Courses, studies, etc. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { students. } \end{aligned}$ | Per cent of total number. | Male students. | Per cent of total number of male students | Female students. | Percent of total number of female students. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Students preparing for college: |  |  |  |  |  |  |
| Scientific course | -34,919 | 4.80 | 13,835 | 6.04 6 | 11,053 | 5.29 3.66 |
| Total preparing for college | 56, 202 | 10.82 | 29,065 | 13.44 | 27,137 | 8.95 |
| Graduating in 1900 | 61,737 | 11.89 | 22, 575 | 10.44 | 39,162 | 12.92 |
| College preparatory students ingraduating class | 18,603 | c 30.28 | 8,592 | a 38,06 | 10,101 | a 25. $\% 9$ |
| Students in- |  |  |  |  |  |  |
| Latin. | 202, $66 \%$ | 50. 61 | 101, 894 | 47.13 | 160, 873 | 53.09 |
| Greek | 14, 813 | 2.85 | 8,09\% | 3.70 | 6,811 | 2.25 |
| French | 40, <br> 74,495 <br> 188 | 14.78 | 14,188 | 6. ${ }^{\text {6. }} 3.40 \cdot$ | 26, 206 | 14.65 |
| Algebra | 293,287 | 56.29 | 123,316 | 57.04 | 168,971 | 55.76 |
| Geometry | 142,235 | 27.39 | 58,415 | 27.02 | 83,820 | 27.66 |
| Trigonometry | 9,915 | 1.91 | 5,251 | 2.43 | 4,654 | 1.54 |
| Astronomy . | 14,435 | 2.78 | 5,464 | 2.53 | 8,971 | 2. 96 |
| Physics. | 98,846 | 19.04 | 42, 149 | 19.49 | 56,697 | 18. 71 |
| Chemistry | 40,084 | 7. 22 | 17,794 | 8.23 | 22, 290 | 7.36 |
| Physical geography | 121, 335 | 23.37 | 51,028 | 23. 60 | 70,207 | 23.20 |
| Geology | 18.743 | 3.51 | 7,624 | 3. 53 | 11.119 | 3. 67 |
| Physiology | 142,401 | 27.42 | 60, 566 | 28.01 | 81,835 | 27.00 |
| Psycholog | 12,368 199,803 | $\begin{array}{r}2.38 \\ 38.48 \\ \hline 8.10\end{array}$ | - 4,532 | 2.10 | 7,836 | 89.20 |
| Rnetoric | 1918,613 | 35. 48 | 81, $8 \times 238$ | 37.47 40.90 | 1180, 188 | 39.20 42.06 |
| History (other than United States) | 198, 125 | 38.16 | \%8, 120 | 36.13 | 120, 005 | 39.60 |
| Civics.. | 112, 465 | 21.66 | 47,572 | 22.00 | 64, 893 | 21.41 |

The above table shows that there were 232,763 public high-school students studying Latin, or 50.61 per cent of the whole number. It may be noted that a greater proportion of female than of male students were studying Latin. There were 101,894 , or 47.13 per cent, of the male students and 160,873 , or 53.09 per cent, of the female students in Latin. Only 3.70 per cent of the male students and 2.2. per cent of the female students were studying Greek. The per cent of male students strudying algebra was $5 \% .04$, and the per cent of female students in the same soudy was 55.76. The total number studying algebra was 292,287, or more than 56 per cent of the total public high-school enrollment. The numbers and percentages of the other leading high-school studies are given in the above table for the United States, and for the States in detail in Tables 3 to 11.
As shown in Table 3, Latin was taught in 5,154 of the 6,005 public high schools. This was an increase of 448 in the number of schools in which Latin was taught.
The namber of students was 22,786 more than the preceding year.
The per cent of students in each of the leading high-school studies reported annually for the past eleven years is given in the table which follows. It will be noted that the per cent of students in Latin has increased from 34.69 in 1889-90 to 50.61 in 1899-1900. In the same period the per cent in a!gebra increased from 45.40 to 56.20 , the per cent in German from 10.51 to 14.33 , and the per cent in general history from $2 \% .31$ to 38.16 . The proportion of students in Greek, which had remained at a fraction above 3 per cent for ten years, fell to 2.85 per cent in 1839-1900.

Per cent of total number of secondary students in public high schools in certain courses and studies, etc.

| Studentsandstudies. | 1880-90 | 1890-91 | 1891-92 | 1892-93 | 1893-94 | 1884-95 | 1895-96 | 1896-97 | 189\%-98 | 1898-89 | $\begin{aligned} & 1893- \\ & 1300 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males .Females | $\begin{aligned} & \frac{4 . .67}{57} \\ & 57.33 \end{aligned}$ | $\begin{aligned} & 40.27 \\ & 59.73 \end{aligned}$ | $\begin{aligned} & 40.59 \\ & 59.41 \end{aligned}$ | $\begin{aligned} & 40.10 \\ & 59.90 \end{aligned}$ | $\begin{aligned} & 40.45 \\ & 59.55 \end{aligned}$ | $\begin{aligned} & 41.15 \\ & 58.85 \end{aligned}$ | $\begin{aligned} & 41 . \tilde{n} 1 \\ & 58.49 \end{aligned}$ | $\begin{aligned} & 42.36 \\ & 57.64 \end{aligned}$ | $\begin{aligned} & 42.08 \\ & 57.92 \\ & \hline \end{aligned}$ | $\begin{aligned} & 41.39 \\ & 58.61 \end{aligned}$ | $\begin{aligned} & 41.64 \\ & 58.35 \end{aligned}$ |
| Preparing for college, classical course | 7.38 | 6.04 | 6.33 | 7.50 | 7.8\% | 7.53 | \%. 68 | 6. 62 | 6.21 | 6.10 | 6.02 |
| Preparing for college, scientilic courses | 7.06 | 5.80 | 6.90 | 7.10 | 6. 43 | 6. 22 | 6.14 | 5.55 | 5.15 | 5.41 | 4.80 |
| Total preparing for col- | 14.44 | 11.81 | 13.23 | 14.60 | 14.30 | 13.75 | 13.82 | $12.1 \%$ | 11.36 | 11. ${ }^{\text {or }} 1$ | 10.82 |
| Graduates | 10. 78 | 12.00 | 11.48 | 12.60 | 12. 90 | 12.11 | 12.05 | 12.2: | 11. 79 | 11.86 | 11.89 |
| Graduates prepared for college a .... ... |  | 28.58 | 32.44 | 29.97 | 26.70 | 25.08 | 29.28 | 29.25 | 27.45 | 28.85 | 30.28 |
| StudyingLatin | 34.69 | 41.20 | 38.88 | 43.06 | 44.78 |  | 46.18 |  |  | 50.39 |  |
| Greek | 3.05 | 3.00 | 3.08 | 3.40 | 3.33 | 3.10 | 3.11 | 3.13 | 3.12 | 3.12 | 2.85 |
| French | 5. 84 | 5. 70 | 5.18 | 6. 42 | 6. 81 | 6. 2.2 | 6.99 | 6. 86 | 7.54 | 7.94 | 7. 78 |
| Germa | 10.51 | 15.92 | 10.43 | 11.92 | 11. 77 | 11.40 | 12.00 | 13.42 | 13.25 | 14.01 | 14.33 |
| Algebra- | 45.40 | 52.20 | ${ }_{2}^{48.93}$ |  | 56.14 27.20 | 54.27 23.34 | 24.64 | 55.46 | 56.13 <br> $7 \%$ <br> 7.19 | 57.69 87.94 | ${ }_{26.39}^{56.29}$ |
| Trigonometr |  | 2. 60 | 23. 38 | $\stackrel{\text { 23.00 }}{2.73}$ | 26.20 <br> 2.93 | $\stackrel{20.34}{2.53}$ | 26.23 2.48 | ${ }^{20.45}$ | 28.09 | $\begin{array}{r}27.9 \pm \\ 2.05 \\ \hline\end{array}$ | 2.39 1.91 |
| Astronomy |  |  |  |  |  | 4. 79 | 4. 40 | 4.21 | 3.82 | 3. 33 | 2.88 |
| Physics | 22.21 | 24.00 | 22.82 | 23. 27 | 20.29 | 22.77 | 22.08 | 21.09 | 20.69 | 20.20 | 19.01 |
| Chemistry | 10. 10 | 10. 20 | 10. 17 | 10.00 | 10.31 | 9. 15 | 8.95 | 8.83 | 8.30 | 8.39 | 7.7\% |
| Geology - |  |  |  |  |  | 5.00 | 4.80 | 4.62 | 4.37 | 4.04 | 3.61 |
| Physiology |  |  |  |  |  | 29.95 | 31.94 | 30.84 | 29.98 | 29.21 | 27.42 |
| Psychology |  |  |  |  |  | 2.71 | 3.00 | 2.90 | 2.74 | 2.39 | 2.38 |
| Rhetoric |  |  |  |  |  | 32.05 | 3\%. 34 | 34.24 | 35.97 | 37.55 | 38. 48 |
| English lit -...... |  |  |  |  |  |  |  |  | 40.07 | 41. 13 | 42.10 |
| istory (other <br> thau U.S.)..... | 27.31 | 28.20 | 30.97 | 33.88 | 33. 48 | 34.33 | 35. 28 | 35. 76 | 37. \% 0 | ${ }_{91}^{38.32}$ | 38.15 |

[^122]The actual number of students reported as proparing for college has greatly increased each year, but there has been a falling off in the percentage in the last ten years. In 1889-90 the per cent of public high-school students preparing for college was 14.44 , and in 1899-1800 only 10.82 .

Tables 12,13 , and 14 compare the statistics of public high schools in cities and outside of cities. In cities of 8,000 population and over there were 691 public high schools, with 7,874 instructors and 235,139 students. Outside of these cities there were 5,314 public high schools, with 12,498 instructors and 284,112 students. In the cities the high schools had an average of 340 students to the school, while the average outside of the cities was 54 students to a school.

EQUIPMENT AND INCOME.
The equipment and insome of the public high schools in each State may be found summarized in Table 15, so far as the items were reported to this Office. The number of volumes in the libraries of 4,899 schools was $2,727,003$; the value of grounds, buildings, scientific apparatus, etc., owned by $4, \% 42$ schools was $\$ 98,131,605$. Owing to the fact that in most cases separate accounts are not kept of the proportion of public appropriations used by the high schools, only 2,067 of these schools were able to report the amounts of State or municipal aid received. The aggregate of these amounts was $\$ 5,545,246$. The aggregate received from tuition by 1,688 schools was $\$ 537,576$. The amount received by 782 schools from sources reported as unclassified was $\$ 1,387,420$. Nearly all of the latter item should be credited to State, county, or city appropriations. The total income of 2,280 schools reporting this item was $\$ 7,561,121$.

## Private Migh Schools and Academes.

Tables 16 to 29 summarize the statistics of private high schools, academies, and seminaries. Tables 16 to 26 are similar in form to Tables 1 to 11 , re'ating to public high schools, and the two series may be compared. Tables 27 and 15 may also be compared. Table 30 is a comparative sho wing of the average number of teachers and students in public and private high schools.

For the year 1899-1900 there were 1,978 private secondary schools reporting to this Office, or 21 more than the number reporting the previous year. These schools had 10,117 teachers for secondary students, an increase of 707 , and 110,797 secondary stadents, an increase of 6,959 . The total number of private secondary students included 2,300 colored students- 2,125 in private colored schools in the two southern divisions, and 265 in the other divisions. The 1,978 schools reported 126,886 in the elementary grades.

## STUDENTS AND COURSES OF STUDY.

In the private secondary schoo's there were 35,315 students preparing for college, or nearly 33 per cent of the number enrolled. As shown in Table 17, the number of these college preparatory students preparing for the classical course was 21,126, and the number preparing for scientific courses 14,189. The number of graduates in 1900 was 12,216 , or more than 11 per cent of the secondary students enrolled. In the classes that graduated there were 5,673 students prepared for college, or over 46 per cent of the graduates. There were 8,900 students in military drinl, an increase of 441 over the preceding year.

The number of students in each of 18 high-school studies in each State will be found in Tables 18 to 23 , while the percentages of students in these studies are shown in Tables 24, 25, and 26. The following table gives a synopsis of the number and per cent of students, by sex, in college preparatory courses, and in the leading high-school studies in private secondary schools in 1890-1900:

Students in certain courses and studies in private high schools and academies.

| Courses, studies, etc. | Number of students. | Per cent of total number. | Malestudents. | Percent of total number of nuale stadents. | Female <br> stu- <br> dents. | Per cent of total number of fermale students. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Students proparing for college: |  |  |  |  |  |  |
| Classical course | 21,126 | 19. 07 | 12, 780 | 22.93 | 8,346 | 15. 16 |
| Scientific course | 14, 189 | 12.86 | 9,234 | 18.34 | 4,965 | 9.02 |
| Total preparing for college | 35.315 | 31.93 | 22,604 | 41.27 | 13,311 | 24.18 |
| Graduating in 1900 | 12,216 | 11.03 | - 6,235 | 11.12 | 5,990 | 10.89 |
| College preparatory students in graduating class | 5,673 | a 46.43 | 3,825 | a 61.47 | 1,848 | ${ }_{\text {a }} 30.8 .5$ |
| Students in- |  |  |  |  |  |  |
| Latin | 52,089 | 46.92 | 27,978 | 51.09 | 24, 111 | 43. 78 |
| Greek | 10,256 | 9.77 | 7,917 | 14.21 | 2,139 | 3.88 |
| French - | 25,289 | 22. 83 | 9,494 | 17.03 | 15,795 | 28.19 |
| German | 20,465 | 18.47 | 10,961 | 19.67 | 9,504 | 17.26 |
| Algebra | 54,726 | 49.40 | 29, 390 | 52. 73 | 25, 336 | 46.01 |
| Geometry | 26,283 | 23.72 | 15, 681 | 24.14 | 10,60\% | 19.07 |
| Trigonometry | 5,353 | 4.83 | 3,501 | 6.28 | 1,85\% | 3.36 |
| Astronomy - | 7,160 | 6.46 | 2,456 | 4. 41 | .4, 704 | 3. 54 |
| Physics... | 20,090 | 18.87 | 10, 405 | 18.67 | 9,685 | 17.59 |
| Chemistry | 10,347 | 9.34 | 5,359 | 9.62 | 4,988 | 9. 06 |
| Physical geography | 22, 800 | 20.57 | 10, $62 \%$ | 19.05 | 12,178 | 22.12 |
| Geology - | 6,557 | 5. 91 |  | 4.89 | 3,829 | 6.935 |
| Physiology | 27,443 | 24.77 | 12,005 | 21.54 | 15,438 | 28.03 |
| Psycholog | 7,758 | \%4.00 | 2, ${ }_{17}$ | 5.21 | 4, 836 | 8.78 |
| Rhetoric | 37,699 4080 | 34.02 | 17,269 | 30.93 | 20, 433 | 37.10 |
| English literature (other than United States) | 40, 009 | 36.11 | 18,099 | 32.47 | 21,910 | 39.79 |
|  | 20,398 | 18.41 | 9,398 | 16.86 | 11,000 | 19.96 |

$a$ Per cent of total number of graduates.
An interesting comparison may be made with the above table and a simi'ar synopsis on a preceding page relating to public high schools. It is shown that nearly 32 per cent of the private high-school students were preparing for college, whie less than 11 per cent of the public high-school students were making such preparation. In both the public ant private high schools over 50 per cent studied Latin. The per cent studying algebra in the private high schoois was 49.40 and in the public high schools 56.29.
The following table shows the progress made by the private high schonls and academies in the past ten years as indicated in the increased percentages of students in certain courses and studies:
Per cent of total number secondary siudents in private high schools and academies in certain courses and studies.

| Students and studies. | 1889-90 | 1890-91 | 1891-92 | 1892-93 | 1893-94 | 1894-95 | 1895-96 | 1896-97 | 189\%-08 | 1898-99 | $\begin{gathered} 1899 \\ 1900 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males | $59.0 \%$ | 50.97 | 52. 14 | 52.10 | 50.39 | 48.46 | 50.15 | 49.44 | 49.58 | 49.98 | 50.30 |
| Females | 49.93 | 49.63 | 47.86 | 47.90 | 49.61 | $51.5{ }^{\text {b }}$ | 49.85 | 50.50 | 50.42 | 50.02 | 49.70 |
| Preparing for college, classical course .-............ | 17.54 | 13. 62 | 15.87 | 15.60 | 16.36 | 17.30 | 18.50 | 17.72 | 15. 54 | 16.00 | 19.07 |
| Preparing for college, scientific cour'ses $\qquad$ | 10.15 | 7.62 | 9.23 | 10.90 | 9.55 | 9. 78 | 10.78 | 10.45 | 9.88 | 9.74 | 13.80 |
| Total preparing for college.... | 27. 70 | 21.24 | 25.09 | 23. 50 | 25.91 | 27.03 | 29.28 | 28.17 | 23.36 | 23.74 | 31.87 |
| Graduates | 8.50 | 7. 20 | 8.41 | 8.70 | 9.40 | 10.11 | 10.58 | 10.93 | 11.51 | 11.42 | $11.0 \%$ |
| Graduates prepared for college $\alpha$ |  | 61.37 | 61.68 | 60.10 | 50.39 | $4 \% .93$ | 46.55 | 46.81 | 41.35 | 44.75 | 46.52 |
| StudyingLatin. | 31.32 | 37.09 | 38.60 | 39.23 | 40.77 | 43.14 | 46.36 | $46.6 \%$ | 48.45 | 49.80 | 46.93 |
| Greek | 7.02 | 8.00 | 8.48 | 8.61 | 9.04 | 9.55 | 9.83 | 10.2; | 10.43 | 9.55 | 9.77 |
| French | 17.03 | 16. 30 | 16.69 | 18.47 | 18.85 | 19.38 | 21.31 | 21.83 | 23.04 | 23.15 | 22.83 |
| German | 13.55 | 15. 10 | 14.45 | 15.63 | 15.25 | 16.07 | 17.46 | 18.84 | 18.45 | 19.04 | 18.47 |
| Algebra | 37.12 | 45.00 | 44.57 | 42.75 | 44.37 | 46.88 | 49.82 | 49.50 | 51. 70 | 52.17 | 49.40 |
| Geometry | 17.36 | 19.60 | 19.66 | 20.37 | 20.54 | 22.06 | 23.84 | 24.45 | 24.43 | 24.71 | 23. 72 |

Per cent of total number secondary students in private high schools, etc.-Cont'a.

| Students and studies. | 1889-90 | 1890-91 | 1891-9: | 1892-93 | 1893-94 | 1894-95 | 1895-96 | 1896-97 | 1897-98 | 1898-99 | $\begin{gathered} 1899- \\ 1900 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Studying- |  |  |  |  |  |  |  |  |  |  |  |
| Trigonometry |  |  | 4.37 | 5. 76 | 5.93 | 5. 39 | 5.51 | 5.45 | 5. 25 | 5.02 | 4.83 |
| Astronomy --- |  |  |  |  |  | 6. 69 | 7.99 | \%. 46 | 6.91 | 6.75 | 6. 46 |
| Physics -... | 18.39 | 20.98 | 20.16 | 19.76 | 20.91 | 20.32 | 21.02 | 20.14 | 19.59 | 18.89 | 18.87 |
| Chemistry -- | 8.59 | 10.60 | 9.83 | 9.94 | 10.32 | 9.79 | 9.89 | 10.49 | 9.62 | 9.78 | 9.34 |
| Physical geog |  |  |  |  |  | 18.15 | 22.77 | 21. 81 | 21. 79 | 21.25 | 20.50 |
| Geology --...- |  |  |  |  |  | 7.08 | 6.61 | 6.11 | 5.90 | 6.11 | 5. 91 |
| Physiology |  |  |  |  |  | 22.34 | 28.01 | 26.71 | 26.80 | 25.95 | 24. $7 \%$ |
| Psychology |  |  |  |  |  | 5.13 | 6.74 | 7.35 | 7.48 | \%.07 | 7.00 |
| Rhetoric |  |  |  |  |  | 29.12 | 32.01 | 32.00 | 32. 43 | 32. 78 | 34.02 |
| English lit .-..... |  |  |  |  |  |  |  |  | 33.88 | 35.30 | 36.90 |
| History (other than U. S. )..... | 23.98 | 33.10 | 32.2\% | 32.46 | 34.07 | 35.60 | $3 \% .35$ | 37.31 | 37.59 | 38.32 | 36.11 |
| Civics .--------- |  |  |  |  |  |  |  |  | 15.74 | 15.95 | 18.41 |

The above table shows that in the private secondary schools the per cent of graduates has increased from 8.50 in 1890 to 11.02 in 1900, while the proportion of graduates prepared for colieges has decreased from 61.37 per cent in 1891 to 46.52 per cent in 1900. As in the case of public high schools, there has been a marked increase in the number of students in certain studies. The per cent studying Latin increased from 31.32 in 1889-90 to 46.92 in 1899-1900, and the per cent in algebra from 37.12 in 1889-00 to 49.40 in 1899-1000. In the public high schools it has been noted that about 3 per cent of the students reported each year for ten years have been studying Greak. In the private high schools the percentage .increased from 7.02 in 1889-90 to $9.7 \%$ in 1899-1900.

## EQUIPMENT AND INCOME,

Table 27 exhibits the equipment, income, benefactions, value of endowment, etc., of the private secondary schools. The number of volumes in the libraries of 1,372 of these schools was $1,734,026$. The value of buildings, grounds, scientific apparatus, etc., owned by 1,390 schools was $\$ 53,854,136$. The amount of aid from public funds received by 272 of these schools was $\$ 155,874$. The tuition fees of 1,207 schools aggregated $\$ 6,061,255$, while 302 schools derived $\$ 1,660,640$ from productive funds. Receipts from sources not named amounted to $\$ 1,228,206$ for 478 schools. The aggregate income of 1,281 schools was $\$ 9,079,805$. During the year 178 schools received benefactions amounting to $\$ 913,832$. The total money value of the endowments of 301 schools is reported as $\$ 29, \% 51,5 \% \%$.

## Denominational Schools.

Of the 1,978 private secondary schools reported, 945 are controlled by religious denominations. In these denominational schools there were $5,0 \% 4$ instructors and 53,624 secondary students, as against 5,043 instructors and 57,173 students in the 1,033 nonsectarian schools. In Table 43, which gives in detail the statistics of private secondary schools, the name of the religious denomination controlling each school is given in column 4. Tables 28 and 29 show the number of schools in each State controlled by each reigious denomination. The following synopsis is made from these tables:

| Religious denomination and nonsectarian. | Schools. | Instructor's. | Students. |
| :---: | :---: | :---: | :---: |
| Nonsectarian. | 1,033 | 5, 043 | 57, 1\%3 |
| Roman Catholic | 361 | 1,910 | 15, 872 |
| Episcopal. | 98 | 714 | 5,145 |
| Baptist .-- | 96 | $5: 9$ | 7, 173 |
| Presbyterian | 93 | 402 | 4, 574 |
| Methodist .-. | 65 55 | 324 296 | 5,5\%2 |
| Congregational | 51 | 242 | 2,6\%1 |
| Methodist Episcopal South | 38 | 154 | 2, 863 |
| I_utheran ............-.-.-. | 32 | 175 | 2,032 |
| Other denominations | 56 | 328 | 4,344 |
| Total | 1,9\%\% | 10,117 | 110,797 |

## Public and Private Secondary Schools.

The statistical summaries of public and private secondary schools are combined in Tables 31 to 38. Table 30 presents a comparison of certain statistics. It is shown that in the public high schools there are about $8 \%$ students to a school and 26 students to a teacher, while in the private schools there are 56 students to a school and only 11 secondary students to a teacher. Table 31 shows that the 7,983 public and private secondary schools had 30,489 teachers and 630,048 students. Nearly $5 \%$ per cent, or 358,107 , of these students were females. The number of students preparing for college was $91,51 \tilde{\sim}$, or nearly 15 per cent of the total secondary enrollment. The graduates for 1900 numbered 73,953 , or nearly 12 per cent of the number enrolled for the year. The number of graduates who had prepared for college was 24,386 , or nearly 33 per cent of the total number of graduates.

Tables 33 to 38 give the number and per cent of students in each of the 18 leading high-school studies in each State. The following synopsis shows the number o. male and female stadents in certain courses and studies for the United States in 1899-1900:

Students in certain courses and studies in public and private high schools and academies.

| Courses, studies, etc. | Number students. | Per cent ol total number. | Male students | Per cent of total number male students, | Female stadents. | Per cent of total number female students. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Students preparing for college: Classical course. Scientific courses | $\begin{aligned} & 52,409 \\ & 39,108 \end{aligned}$ | $\begin{aligned} & 8.32 \\ & 6.21 \end{aligned}$ | $\begin{aligned} & 28,010 \\ & 23,059 \end{aligned}$ | 10.30 8.48 | $\begin{aligned} & 2,299 \\ & 16,049 \end{aligned}$ | 6.81 4.48 |
| Total preparing for college | 91,517 | 14.53 | 51,069 | 18.78 | 40,448 | 11.29 |
| Graduating in 1900 | 73,953 | 11.74 | 28,801 | 10.59 | 45, 15\% | 12.61 |
| College preparatory students in grad. nating class | 24,368 | a 33.95 | 12,417 | a 43.11 | 11,949 | a 26.46 |
| Students in- |  |  |  |  |  |  |
| Latin. | 314,858 | 49.97 | 129, $87 \%$ | 47.76 | 184, 984 | 51.66 |
| Greek | \% 4.869 | 3. 9 "3 | 15, 919 | 5. 85 | 8,950 | 2. 50 |
| French | 65,684 | 10. 108 | 23,682 | 8.71 | 42,002 | 11. 73 |
| Algebra | 34¢, 013 | 55.08 | 152, 706 | 55.15 | 194,307 | 54.26 |
| Geometry | 158,518 | 26.75 | 74, 198 | 27.25 | 94,422 | 26.37 |
| Trigonometry | 15.248 | 2.4 | 8,75\% | 3.22 | 6,516 | 1.82 |
| Astronomy | 21,595 | 3.43 | 7, 920 | 2.91 | 13, 675 | 3.8\% |
| Physies. | 118, 936 | 18.88 | 52, 554 | 19.33 | 66.382 | 18.54 |
| Chemistry | 50, 431 | 8.00 | 23,153 | 8.51 | 27,278 | 7.6\% |
| Physical geography | 144, 135 | 29.88 | 61, 650 | $2 \% .67$ | 82, 485 | 23. 113 |
| Geology - | 25, 300 | 4.02 | 10,302 | 3.81 | 14,048 | 4.17 |
| Physiology | 169,844 | 26.96 | 72, 571 | 20.69 | 97,273 | 27.16 |
| Psychology | 20,126 | 3. 19 | 7,453 | 2.74 | 12,673 | 3.54 |
| Rnetoric English literatu | 237,502 | 37.70 | 98,201 | 35.14 | 139,211 | 38. 87 |
| English literature - H - | 259,493 238,134 | 41.19 37.80 | 105,829 96,219 | 39.28 | 15,673 141,915 | ${ }^{49.63}$ |
|  | 13\%, 663 | 21.6 | 56,970 | 20.95 | 175,893 | 21.19 |

a Per cent of number of graduates.
Fo several years attention has been directed to the steady increase of the number of students in Latin. In 1889-80 there were 100,152 students in public and private high schools studying Latin. This was 33.62 per cent of the total. In 1893-1900 the number had increased to 314,856 , or about 50 per cent of the total number of secomdary students in these schools. There has been but little variation in the percentage of students in Greek, the highest for any year being 4.99 and the lowest 4.27, uncil 1899-1900 when the percentage fell to 3.95. There has been a small increase in the percentage in French. The number studying German increased from 11.48 in 1889-30 to 15.06 in 1899-1900. In the ten years the per cent of students in algebra increased from 42.77 to 55.08 , and the per cent in geometry increased from 20.07 to 26.75 . The percentage of students in general
history increased from 27.83 in 1889-90 to 37.80 in 1899-1900. The following synopsis exhibits these percentages for each of the eleven years:

Per cent of the total number of secondarystudents in public and private high schools and academies in certain courses und studies, etc.

| Students and studies. | 1889-90 | 1 | 1891-9? | 1893-93 | 1893-9 | 1894-95 | 1895-96 | 1896-9\% | 159\%-98 | 93 | $\begin{aligned} & 1899- \\ & 1900 . \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mal | $\begin{aligned} & \text { 45. } 03 \\ & 54.97 \end{aligned}$ | $\begin{aligned} & 43.67 \\ & 55.33 \\ & 5.3 \end{aligned}$ | $\begin{aligned} & 44.01 \\ & 5.59 \end{aligned}$ | 43.62 56.38 | $\begin{aligned} & 43.39 \\ & 56.61 \end{aligned}$ | $\begin{aligned} & 43.00 \\ & 5 \pi \cdot 00 \end{aligned}$ | $\begin{aligned} & 43.40 \\ & 56.60 \end{aligned}$ | $\begin{aligned} & \frac{43.81}{56.16} \end{aligned}$ | $\begin{aligned} & 43.50 \\ & 56.50 \end{aligned}$ | $\begin{aligned} & \frac{43.93}{57.07} \end{aligned}$ | 43.16 56.84 |
|  | 10.61 <br> 8.0 .5 | 8.45 6.38 | 9.18 7.59 | 9.90 8.23 | 8 | 10.00 7.11 | 7.16 | 8.9 | 7.99 6.03 | 7.57 6.18 |  |
| Total preparing for college .... | 18.66 | 14.83 | 16.77 | 18.12 | 17.67 | 17.11 | 17.21 | 15. 51 | 02 | 14.05 |  |
| Graduates | . 05 | 10.51 |  | 11. 45 | 11.8 | 11.60 | 11.73 | 11.95 | 1.75 | 1.78 |  |
| Graduates for colleg. |  | 35. 74 | 39.15 | 33. 6.2 | 30.92 | 33.44 | 32. 69 | 32.60 | 30.69 | 31.61 |  |
|  |  | 33 |  |  |  |  |  |  |  | 50.29 |  |
| Greek- |  | ${ }_{9.165}^{4.65}$ | 4.63 | ${ }_{9}$ | ${ }_{10}^{4}$ | ${ }_{9}^{4.73}$ | ${ }_{10}^{4.58}$ | ${ }_{9}^{4.60}$ | 4.50 | 4.27 |  |
| German | 11.48 | 15.68 | 11.61 | 13.00 |  | 12. 58 | 13.20 | 13.76 | 14.24 | 14.91 | 15.06 |
| Algebra | ${ }^{4} \times 17$ | 49.89 | ${ }^{47}$ | 49.929 | 53.71 | 5.40 | -3.46 | 54.2. | ${ }_{35}^{529}$ | ${ }^{56.21}$ | . 8 |
| eometr | 20.07 |  | ${ }^{23.95}$ | -24.36 | 25. ${ }^{\text {25 }} 80$ | 24.51 | ${ }^{23 .} 815$ | -26. 24 | 26. 59 | 7736 <br> 2.58 <br> 1 |  |
| Astrono |  |  |  |  |  | 5. | ${ }^{5.19}$ | ${ }^{4} 4.89$ | ${ }^{4} 40$ | 3.34 | 3. 4 |
| ${ }_{\text {Physics }}$ Chemistir | ${ }^{21.36} 9$ | ${ }_{10}$ | 10.08 | 9.98 | 10 |  | ${ }_{9}^{21.15}$ | 18 | 18 | 19 | 18.8 |
| Physical |  |  |  |  |  | 23.4 | 24.93 | $2 \pm$ | $2+$ | 2 | 228 |
| Geolo |  |  |  |  |  |  |  |  |  |  | 4.0 |
| Psycholo |  |  |  |  |  | 3.35 | ${ }_{3.82}$ | ${ }_{3}{ }_{8} 9$ | 3. | 3. | 3.19 |
| Rbet |  |  |  |  |  | 31.31 | 32.27 | 33.78 | 35.30 38.90 | ${ }^{36} 40$ | 37. |
| $\begin{aligned} & \text { English literature- } \\ & \text { History } \text { (othe } \\ & \text { than U. S.) } \end{aligned}$ | 27. 83 | 9.77 | 31.35 | 33.46 | 35. | 34.65 | 35.73 | 36.08 | $\begin{array}{r} 37.68 \\ 31+1 \end{array}$ | $\begin{gathered} 38.32 \\ \hline 20 \\ \hline 89 \end{gathered}$ | $\begin{aligned} & 37.80 \\ & 91 \end{aligned}$ |

a Per cent of total number of graduates.

## distribution of secondary students.

Tables 39 and 40 show the distribution of secondary students enrolled in 1893-1900 in the eight classes of institutions mentioned on the first page of this chapter. It is shown that of the 719,241 secondary students reported to this Bureau for the scholastic year, 530,425 were in public institutions and 188,816 were in private institutions. In the public institutions 519,251 were in public high schools, 8,219 in preparatory departments of public universities and colleges, and 2,055 in public normal schools. In the private institutions 110,797 were in private high schools and academies, 48,056 in preparatory departments of private universities and colleges, 6,615 in private normal schools, and 9,521 in mantal training schools.

Table 41 shows that the number of secondary students to each 1,000 of population in the United States was 9.46.

The same table slows that the number of students in higher education was 155,665 , or an average of 2.05 to the 1,000 of population. This number includes all students who in 1899-1900 were receiving higher instruction in colleges, resident graduate students in universities and colleges, and all professional students in theology, medicine, and law. The independent professional schools are included, as well as those classed as departments of universities and colleges. Students of normal schools and schoois of dentistry, vetermary surgery, pharmacy, and nurse training are not here included.

Tables 42 and 43 give in detail the statistics of the 7,983 public and private high
schools reporting to this Bureat in 1839-1900. Table 44 shows the number of public and private high schools for boys only, for girls only, and the number of coeducational secondary schools in each State.

Table 1.-Public high schools-Number of schools, secondary instructors, secondary siudents, and elementary pupils in 1899-1900.

| State or Territory. |  | Secondary teachers. |  |  | Secondary stu-dents. |  |  | Colored students (included in preceãing column). |  |  | Elementarypupils, including all below sec-ondary grades. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $$ |  | $\begin{aligned} & \text { त్ } \\ & \text { R } \end{aligned}$ | $\begin{gathered} \stackrel{\leftrightarrow}{3} \\ \stackrel{y y}{c \mid} \end{gathered}$ |  | $\begin{aligned} & \text { تूं } \\ & \text { सें } \end{aligned}$ | $\begin{aligned} & \text { @́ } \\ & \text { 亗 } \end{aligned}$ | * | $\begin{aligned} & \text { تig } \\ & \text { Hig } \\ & \text { E- } \end{aligned}$ |
| nited States. | 6,005 | 10,172 | 10,200 | 0, | 16,207 | 303, 044 | 219, ${ }^{\text {a }} 1$ | 2,655 | , 740 | 8,395 | 47,311 | 47,637 | 94,948 |
| N.Atlantic Division | 1,448 | 2,726 | 3, $9: 25$ | 6,651 | 73,383 | 96, | 169, |  | 610 | 975 | 7,555 | 7,8 | 15,380 |
| S. Atlantic Division | 419 | 655 | 535 | 1,191 | 10,553 | 16,46 | 27,013 |  | 1,410 | 1,89 | 7,481 | 6,9 |  |
| S. Central Division - | 675 | 996 | 7 | 1,719 | 16,080 | 23,289 | 39,669 |  |  |  | 9,703 |  | 18,815 |
| N.Central Division. | 3, 163 | 5,209 | 4, 476 | 9,635 | 103,980 | 149,886 | 234, 816 |  |  | 2,90 |  |  | , |
| Western Division | 270 | 586 | 540 | 1,126 | 11,261 | 17,087 | 28,348 | 37 | 85 | 122 | 562 | 52 | 1,088 |
| N.Atlantic Division: Maine | 154 | 174 | 199 | 343 | 3,828 | 4,921 | 8, 749 |  |  |  | 82 | $9 \pm$ |  |
| New Hampshire | 5 | 70 | 10. | $17 \%$ | 1,602 | 2,102 | 3,704 |  |  |  | 295 | 66 | 1 |
| Vermont | 55 | 59 | 92 | 151 | 1,482 | 1,956 | 3,438 |  |  |  | 348 | 318 | 696 |
| Massachusett | 237 | $55 \%$ | 955 | 1,512 | 15, 718 | 20,226 | 35, 9.14 | 90 | 114 | 204 | 71 | $78 \%$ | 1,5.33 |
| Rhode Is'and | 20 | 74 | 89 | 163 | 1,476 | 1,974 | 3,450 | 19 | 37 | 47 | 75 | 49 | 124 |
| Comnecticut | 74 | 130 | 228 | 352 | 3,519 | 4,588 | 8,107 | 9 | 120 | 27 | . 144 | -180 | 030 |
| New York | 378 | 776 | 1,434 | 2,210 | 29,019 | 33,347 | 62, 366 | 169 | 138 | 248 | 2,461 | 2,5:8 | 4,939 |
| New Jersey | 96 | 192 | 336 | 528 |  | 7,098 | 11,260 | 50 | 90 | 140 | 598 | 6, 636 | 1,234 |
| Pennsylvania.-- | 377 | 694 | 526 | 1,200 | 12,437 | 19,950 | 32,387 | 90 | 204 | 294 | 1,981 | 2,192 | 4,173 |
| S Atlantic Division: <br> Delaware | 13 | 18 | 24 | 41 |  |  |  |  |  |  | , | , |  |
| Maryland | 51 | 95 | 64 | 159 | 1,720 | 2,236 | 3,956 | 71 | 150 | 221 | 893 | 5 | 1,545 |
| Dist. Colum | 5 | 55 | 82 | 137 | 1,313 | 2,118 | 3,431 | 198 | 506 | 804 | 0 | 0 |  |
| Virginia | 70 | 82 | 101 | 183 | 1,596 | 2,734 | 4,330 | 109 | 438 | 548 | 1,166 | 1,191 | 2,357 |
| West Virginia | 32 | 5.2 | 28 | 80 | 665 | 1,290 | 1,955 | 16 | 40 | 56 | ${ }^{55}$ | 57 | 112 |
| North Carolina | 21 | 24 | 18 | 42 | 405 | 538 | 943 | 10 | 40 | 50 | 295 | 284 | 579 |
| South Carolina | 104 | 134 | 76 | 210 | 1,693 | $\stackrel{\sim}{2}, 305$ | 3,998 | 49 | 129 | 169 | 2,170 | 1,985 | 4,155 |
| Georgia | 120 | $15!$ | 169 | 259 | 2,202 | 3,643 | 5, 845 | 14 | 65 | 79 | 2,344 | 2,272 | 4,616 |
| Florida | 33 | 46 | 34 | 80 | 557 | 946 | 1,503 | 21 | 51 | 72 | 491 | 408 |  |
| S. Central Division: Kentucky. | 70 | 119 | 113 | 232 | 2,312 | 3,205 | 5,5 | 233 | 481 | 714 | $60 \%$ | $65 \pm$ | 1,261 |
| Tennessee | 101 | 131 | 93 | 224 | 2,169 | 3,253 | 5,423 | 113 | 288 | 400 | 2,141 | 1,953 | 4.094 |
| Alabama | 62 | 92 | 93 | 185 | 1,478 | 2,339 | 3, 817 | 25 | 45 | 70 | 1,445 | $9{ }^{6}$ | 2,415 |
| Mississipp | 100 | 110 | 93 | 203 | 1,618 | 2,434 | 4, 05 | 87 | 307 | 394 | 1,971 | 1,955 | 3,926 |
| Louisiana | 210 | 57 | 59 | 116 | ${ }_{6}^{814}$ | 1,401 | 2, 2, 15 | 195 | 45 | 71 | ${ }^{353}$ | 336 |  |
| Arkansas | 61 | 87 | 42 | 129 | 1,371 | 1,853 | 3, 224 |  | 190 | 273 | 618 | 715 | 3 |
| Oklahoma |  | 10 | 8 | 18 | 117 | 219 | 336 |  | 13 | , | , |  |  |
| Indian Territory | 4 | 8 | 2 | 10 | 123 | 34 | 157 | 0 | O | 0 | 256 | 3 | 49 |
| N. Central Division: | 678 | 1,073 | 641 | 1, 717 | 19, 253 | 25,959 | 45, 712 | 240 | 388 | 608 | 8,383 |  |  |
| Indiana | 382 | 1738 | 370 | 1,108 | 11,184 | 15,231 | 26, 115 | $1 \% 6$ | 295 | 471 | 2,776 | 2,94 | 5, 117 |
| Inlinois | 344 | 721 | 697 | 1,418 | 14,670 | 22, 776 | 37, 444 | 135 | 223 | 358 | 1,246 | 1,355 | 2,601 |
| Michigar | 294 | 477 | 610 | 1,087 | 12, 146 | 16,665 | 28, 811 | 32 | 56 | 88 | 1,831 | 2,034 | 3,865 |
| Wisconsin | 231 | 381 | 409 | 790 | 8,750 | 11,876 | :00,626 | 5 | 10 | 20 | 514 | 649 | 1,193 |
| Minnesota | 115 | 181 | 330 | 511 | 5, 220 | 7,290 | 12,310 | 13 | 29 | 42 | 171 | 194 |  |
| Iowa --- | 344 | 479 | 582 | 1,051 | 11,7\%3 | 17,249 | 29,0\%2 | 36 | 71 | 107 | 1,528 | 1,619 | 3,147 |
| Missouri | 234 | 428 | 317 | 745 | 8,208 | 12,398 | 20,606 | 197 | 485 | 682 | 1,093 | 1,232 | 10, |
| North Dak | 27 | 31 | 34 | 65 | 442 | 688 | 1,130 | 7 | 5 | 12 | 63 | 79 | 112 |
| South Dak | 61 | 10 | $4{ }^{2}$ | 119 | 1,111 | 1,505 | 2,617 | 3 | 1 | 4 | 518 | 694 | 1,212 |
| Nebraska | 250 | 3:20 | 226 | 546 | 6, 053 | 9,155 | 15,208 | 10 | 29 | 89 | 2,992 | 3,015 | 6, 007 |
| Western Division: | 203 | 310 | 208 | 518 | 5,870 | 9,043 | 14,913 | 142 | 312 | + | 833 | 1,002 | 1,835 |
| W estern Division: Montana -....... | 19 | 25 | 43 | 68 | 642 |  | 1,635 | ) | 5 |  | 109 | 109 | 209 |
| W yoming | 7 | 8 | , | 17 | 155 | 202 | 357 | 1 | 0 | 1 | 68 | 41 | 109 |
| Colorado | 44 | 127 | 104 | 231 | 2,337 | 3,573 | 5,916 | 11 | 40 | 51 | 7 | 82 | 159 |
| New Mex |  | 14 | ${ }_{6}^{6}$ | 20 | 100 | 143 |  |  |  | 1 | 0 | 0 |  |
| Arizona |  | 5 | + | 8 | ${ }_{4}^{57}$ | 115 | 1,115 |  |  |  | 0 | 0 0 |  |
|  | 9 | 12 | 18 | 39 28 | 164 | - | 1,145 | 2 | 1 | 1 | 33 | 7 | (0) |
| Idaho |  | 11 | 7 | 18 | 216 | 270 | 486 |  |  |  | 0 | 0 |  |
| Washing | 47 | 77 | 60 | 137 | 1,326 | 2,137 | 3,463 | 5 |  | 12 | 241 | 210 | 451 |
| Oregon | 17 | 31 | 29 | 60 | 743 | 1,173 | 1,916 | 1 | \% | 3 | 43 | 57 | 100 |
| Californ | 105 | 255 | 251 | 506 | 5,030 | 7,590 | 12, 6:0 | 14 | 28 | 42 | 0 | 0 | 0 |

Table 2.-Publichigh schools-Number of secondary students in college preparatory courses and number of graduates and college preparatory students in graduating class in 1899-1900.


Table 3.-Public high schools-Number of secondary students pursuing certain studies in 1899-1900.

| State or Territory. | Latin. |  |  |  | Greek. |  |  |  | French. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \dot{0} \\ & \text { స్ } \\ & \text { む̈ } \\ & \text { - } \\ & \text { in } \end{aligned}$ |  |  | $\stackrel{0}{\text { ® }}$ |  | $\begin{aligned} & \text { Fi } \\ & \text { 今 } \\ & \text { ह1 } \end{aligned}$ |  | - |  | + |
| United Stat | 5, 154 | 101, 894 | 160, 873 | 262, 767 | 1,011 | 8,002 | 6, 811 | 14,813 | 925 | 14,188 | 26,207 | 40, 395 |
| North Atlantic Division | 1,333 | 31,316 | 48,943 | 80, 259 | 623 | 5, 582 | 4, 413 | 9,995 | 626 | 10,778 | 17,719 | 28, 497 |
| South Atlantic Division | 428 | 6, 756 | 10,598 | 17, $35{ }^{\frac{4}{4}}$ | 82 | 425 | 164 | 589 | 85 |  | 1,623 | 2,408 |
| South Cential Division | 598 | 8,538 | 13, 868 | 22, 406 | 75 | 480 | 283 | 713 | 56 | 628 | 1,165 | 1,793 |
| North Central Division | 2, 542 | 49, 488 | 78,310 | 127, 798 | 194 | 1,273 | 1,569 | 2,81.2 | 114 | 1,598 | 4,340 | 5,938 |
| Western Division... | 233 | 5, 790 | 9,154 | 14,950 | 37 | $\therefore 242$ | 432 | 6.4 | 44 | 399 | 1,360 | 1,759 |
| North Atlantic Division: Maine | 136 | 1,66t | 2,483 | 4, 14\% | 79 | 491 | 453 | 944 | 88 | 598 | 1,100 | 1,698 |
| New Hamp | 53 | 780 | 1,207 | 2,007 | 33 | 166 | 181 | 347 | 44 | 500 | 803 | 1, 303 |
| Vermont | 51 | 676 | 924 | 1,600 | 29 | 121 | 82 | 206 | 33 | 193 | 305 | 498 |
| Massachusett | 234 | 6,458 | 10, 412 | 16,870 | 155 | 1,865 | 1,460 | 3, 32อั | 205 | 5,934 | 8, 4:27 | 14, 361 |
| Rhode Island | 17 | 708 | 871 | 1,579 | 10 | 217 | 172 | 389 | 15 | 318 | 615 | 933 |
| Connecticu | 73 | 1,891 | 2,346 | 4,260 | 36 | 335 | 207 | 540 | 34 | 353 | 814 | 1, 16\% |
| New York | 388 | 10,695 | 15, 885 | 26, 581 | 185 | 1,561 | 1,161 | 2, 72: | 166 | 2, 4.8 | 4,388 | 6,811 |
| New Jersey | 71 | 1,738 | 3,053 | 4, 791 | 28 | 217 | 199 | 416 | 20 | 258 | 515 | 783 |
| Penmsylvania | 347 | 6,702 | 11, 722 | 18, $4.3 \pm$ | 68 | 608 | 498 | $1,106^{\circ}$ | 21 | 191 | 75.2 | 943 |
| South Atlantic Division: <br> Delaware | 13 |  |  | 914 |  |  |  |  | 1 | 1 | 12 | 13 |
| Maryland | 49 | 1,273 | 1,597 | 2,870 | 6 | 112 |  | 112 | 10 | 298 | 110 | 333 |
| District of | 4 | 533 | 862 | 1,395 | 4 | $6:$ | 33 | 95 | 4 | 178 | 430 | 608 |
| Virginia | 65 | 991 | 1, 764 | 2, 755 | 6 | 8 | 4 | 12 | 21 | 95 | $3 \pm 7$ | 412 |
| West Virginia | 29 | 226 | 555 | 844 | 2 | 1 | 3 | 4 |  |  |  |  |
| North Carolina | 21 | $2 \% 6$ | 421 | 697 | 2 | 2 |  | 2 | 2 | 6 | 9 | 15 |
| South Caroli | 100 | 1,150 | 1,500 | 2.650 | 20 | 59 | 20 | 79 | 21 | 235 | 242 | 467 |
| Georgia | 118 | 1,679 | 2,885 | 4,564 | 42 | 181 | 104 | 285 | 21 | $5:$ | 425 | 417 |
| Florida - | 29 | 233 | 432 | 665 |  |  |  |  | : |  | 48 | 48 |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentacky | 68 | 1,340 | 1,968 | 3,308 | 13 | 201 | 23 | 223 | 11 | 146 | 49 | 195 |
| Tennessee | $8 \%$ | 1,060 | 1,800 | 2,860 | 13 | 71 | 40 | 111 | 8 | $4 \%$ | 72 | 114 |
| Alabama | 58 | 80.4 | 1,342 | 2,146 | 10 | 58 | 10 | 68 | 11 | 49 | 94 | 143 |
| Mississipp | 87 | 912 | 1,379 | 2,321 | 17 | 71 | 67 | 138 | 4 | 3 | 17 | 20 |
| Louisiana | 27 | 5 O | 1,054 | 1,694 | 1 | 5 | 5 | 10 | 11 | 345 | 817 | 1,16\% |
| Texas | 207 | 2,916 | 4,911 | 7,82\% | 19 | 63 | 73 | 136 | 7 | 16 | 75 | 91 |
| Arkansas | 59 | 751 | 1,213 | 1,964 | 2 | 11 | 16 | $2 \%$ | 4 | 27 | 41 | 68 |
| Oklahoma | 6 | 102 | 198 | 300 |  |  |  |  |  |  |  |  |
| Indian Territory | 4 | 53 | 3 | 56 |  |  |  |  |  |  |  |  |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio | 517 | 9,706 | 13, 62\% | 23, 328 | 43 | 363 | 375 | 738 | 19 | 319 | 658 | 1,00\% |
| Indiana | 355 | 7,026 | 10,246 | 17, 27, | 8 | 37 | 43 | 80 | 5 | 54 | 166 | 220 |
| Illinois | 290 | 6, 862 | 12, $47 \%$ | 19,334 | 30 | 210 | $30 \%$ | 517 | 24 | 374 | 1,556 | 1.930 |
| Michigan | 209 | 3,98\% | 6, 196 | 10,183 | 35 | 194 | 242 | 436 | 31 | 285 | 720 | 1,005 |
| Wisconsi | 115 | 1,936 | 3,174 | 5, 110 | 14 | 105 | 78 | 183 | 4 | 8 | 28 | 36 |
| Minnes | 113 | 3, 361 | 4,849 | 8,210 | 11 | 37 | 59 | 96 | 9 | 294 | 491 | \%85 |
| Iowa | 248 | 4, 897 | 8,414 | 13,311 | 8 | $3 \%$ | 42 | 74 | 6 | 23 | 119 | 142 |
| Missouri | 203 | 4,240 | 6,906 | 11,146 | 20 | 20:2 | $27 \%$ | 474 | 9 | 13\% | $45 \%$ | 589 |
| North Dakota | 26 | $32 \%$ | $55 \%$ | 879 | 1 |  | 1 | 2 |  |  |  |  |
| South D | 42 | 489 | 676 | 1,165 | 3 | 7 | 9 | 16 | 1 | 2 | 6 | 8 |
| Nebraska | 220 | 3.409 | 5,678 | 9,087 | 6 | 34 | 64 | 98 |  | 71 | 120 | 191 |
| Kansas | 184 | 3,253 | 5, 5:0 | 8,7\%3 | 9 | 51 | 77 | 128 | 3 | 6 | 19 | 25 |
| Westem Division: <br> Montana | 17 |  |  |  | 2 | 4 | 13 | 17 |  | 73 | 68 | 14 |
| Wyoming | 6 | 87 | 124 | 211 |  |  |  | 16 |  | 13 | 68 | 141 |
| Colorado | 42 | 1,516 | 2,319 | 3,835 | 8 | 82 | 42 | 3 i | \% | 74 | 413 | $51 \%$ |
| New Mexico | 6 | 42 | 63 | 105 |  |  |  |  |  |  |  |  |
| Arizona | 2 | 26 | 52 | 78 |  |  |  |  |  |  |  |  |
| Utah | 3 | 203 | 260 | 463 |  |  |  |  | 1 | 15 | 20 | 35 |
| Nevad | ¢ | 77 | 137 | 214 |  |  |  |  | 1 | 15 | 13 | i8 |
| Idaho | , | 104 | 132 | 236 |  |  |  |  |  |  |  |  |
| Washing | 29 | 533 | 941 | 1,477 | 1 |  | 6 | 9 |  | 19 | 105 | 134 |
| Oregon | 11 | 266 | 358 | 694 |  |  |  |  |  |  |  |  |
| California | 104 | 2,621 | 4,118 | 6,739 | 26 | 153 | 271 | 421 | 99 | 203 | 711 | 914 |

Table 4．－－Public high schools－Number of secondary students pursuing certain studies in 1899－1900．

| State or Territory． | German． |  |  |  | Algebra． |  |  |  | Geometry． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 范 |  |  |  | 䎡 |  |  |  | 范 | 㓪 | \＃ H゙ |
| United |  |  | 45， 427 |  | 6，003 | 123，316 | 168，971 | 232，287 |  |  | 3，820 | 142，235 |
| North Atlantic Division |  |  |  |  | ，447 | 38, | 47，979 | 86 | 1，34 | 19，65 |  | 44，989 |
| ath Atlantic Divisiou |  |  |  |  |  | 11，34 |  |  |  |  |  |  |
| South Central Division－ |  |  |  |  |  | ${ }_{59} 11$ |  |  |  |  |  |  |
| Western Division． | 103 | 311 | 2， 388 | 3,699 | 270 | 7，274 | 10，280 | 17， 504 | ＋241 | 1 | 5,734 | ，935 |
| North Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine－．－．－．－．．．．． |  |  |  |  | 154 | 2，145 |  | 4，770 | 144 | 1，112 |  |  |
| ermon | 20 | ${ }_{77}$ | 105 | 182 | 55 | 6 | 810 | 1， 4,30 |  | 迷 | 47 |  |
| Massachuset | 105 | 1，422 | 2，780 | 4，202 | 237 | 8，19 | 8，755 | 16，933 | 29 | 5， 474 | 5，5 | 11, |
| Rhode Islan | 15 |  | ${ }^{273}$ |  |  |  |  |  | 18 |  |  |  |
| Connecticut | ${ }_{3}^{44}$ | ${ }_{6} 658$ | ${ }_{8,019}^{889}$ |  | 372 | 11， 1105 | 14，078 | ${ }_{25}^{4}$ | 360 | 1，014 | 7， | ${ }_{1}^{13,337}$ |
| New Jers | 56 | 1，354 |  | 3，600 | 9 | 2， 821 | 4，5 | 7 |  |  |  |  |
| Pennsylvani | 103 | 1，950 | 3，510 | 5，460 | 37 | 8，860 | 12，92i | 21, | 339 | 4，121 | 6， | 10，247 |
| South Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Maryland | 14 | 534 | 676 | 1，210 | 51 | 1，187 | 1，965 | 3，152 | 51 | 1，085 | 1，626 | 11 |
| District of |  | 170 | 470 | 640 | ${ }^{4}$ | 458 | ${ }^{613}$ | 1， |  | 266 | 400 |  |
| Wirgini | 17 | 190 | St | 544 | 70 | 1，174 | 1，7 | 2， |  |  | 674 |  |
| West |  | 4 |  | 13. | 2， |  |  |  |  |  |  |  |
| South Car |  | 130 | 21 | 151 | 104 | 1，298 | 1，745 | 3，013 | ， | 338 | 393 |  |
| Georgia |  | 72 | 63 | 135 | 120 | 1，829 | 3，031 | 4，86 |  | 688 | 1，149 |  |
|  |  |  | 37 | 4. | 33 | 397 | 558 |  | 19 | 104 |  |  |
| South Central Division： |  |  |  | 964 |  |  |  | 3，687 |  |  |  |  |
| Tennessee－ | 6 | 34 | 85 | 119 | 101 | 1，427 | 2，274 | 3，701 |  | 614 |  |  |
| Alabam |  | 16 |  |  |  | 1，090 |  |  |  |  |  | 1，289 |
| Mississip |  |  | 10 | 12 | $\begin{array}{r}100 \\ 31 \\ \hline\end{array}$ | 1，131 | 1，691 |  |  |  |  |  |
| Texas． |  |  |  | 6ia | $2{ }^{2}$ | 4，536 | 6．713 | 11, | 23 |  |  |  |
| Arkansas |  |  |  |  | 1 | 942 | 1，334 | 2，276 |  |  |  |  |
| Oklaho |  |  |  | 11 |  | 85 | 00 | 35 |  |  |  |  |
| NorthCentral Division： |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wisconsin | 136 | 1，96 |  | ${ }^{4,928}$ | 231 | 8，96 | 5，23 | 9，2 |  | 1，91 | 2， 68 | 4， |
|  |  |  |  |  |  |  |  |  |  |  |  | 3，9 |
| Iowa | ． | ， 020 |  | 2， 745 | 21 | 6,0 a |  | 14，8 |  | 2，614 |  |  |
|  | 3 | 98 | 1， |  | ${ }^{234}$ | 5，578 | 7，975 | 13， 2 | － |  |  |  |
| South Dakota－－．．－．－． |  |  |  |  |  |  | 860 |  | 41 | 269 | 373 | 642 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kansas | 56 | 519 | 1，016 | 1，533 | 203 | 3，720 | 5，691 | 9，411 | 76 | 1，548 | 2，583 | 4，131 |
| estern Division |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oregon |  |  | 146 |  | 17 | 506 | 1，725 | 1，231 | 13 | 213 |  | 迷 |
| Calitor | 49 | 365 | 751 | 1，116 | 105 | 3，302 | 4，564 | 7，866 | 103 | 3，077 | 2，70 | 876 |

Table 5.-Public high schools-Number of secondary students pursuing certain studies in 1899-1900.

| State or Territory. | Trigonometry. |  |  |  | Astronomy. |  |  |  | Physics |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \dot{0} \\ & i=1 \\ & i 0 \\ & 0 \\ & 0 . \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  | $\underset{\underset{\sim}{c}}{\stackrel{\leftrightarrow}{\sim}}$ |  | $\begin{aligned} & \text { Wुं } \\ & \text { O } \\ & \text { से } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { تं } \\ & \text { ت̃ } \\ & 0 \\ & E-1 \end{aligned}$ |
| United States | 818 | 5,251 | 4, 664 | 9,915 | 1,055 | 5, 4648 | 8,971 | 14, 435 | 4,898 | 42,149 | 56, 697 | 98,846 |
| North Atlantic Division | 246 | 1,934 | 1,044 | 2,978 | 448 | 1,999 | 3, 611 | 5, 610 | 1,200 | 13,387 | 16,176 | 29, 563 |
| South Atlantic Division | 96 | 688 | 617 | 1,243 | 53 | 329 | 541 | 870 | 261 | 2,815 | 4,051 | 6, 866 |
| South Central Division. | 176 | 78.5 | 1,190 | 1,915 | 93 | 483 | 783 | 1,206 | 571 | 4,271 | 5,710 | 9,881 |
| North Central Division | 219 | 1,470 | 1,476 | 2,946 | 435 | 2,436 | 3,778 | 6,204 | 2,648 | 19, 346 | 27, 605 | 46,971 |
| Western Division. | 81 | 498 | 337 | 833 | 26 | 227 | 318 | 545 | 218 | 2,310 | 3,155 | 5,465 |
| , |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine | 6 | 30 | 11 | 41 | 78 | 324 | $42 \%$ | ${ }_{6} 46$ | 123 | 765 | 824 | 1,589 |
| New Hampshir | 6 | 27 | 6 | 33 | 23 | 114 | 119 | 233 | 39 | 319 | 355 | 674 |
| Vermont ....-. | 2 | 1 | 1 | 2 | 30 | 91 | 143 | 231 | 40 | 210 | 260 | 470 |
| Massachusetts | 45 | 421 | 65 | 486 | 112 | 5261 | 1,12! | 1,650 | 206 | 3, 410 | 3,708 | 7,118 |
| Rhode Island | 4 | 43 | 8 | 51 | 8 | 24 | 68 | 92 | 19 | 473 | 403 | 876 |
| Connecticut | 16 | 112 | 9 | 121 | 31 | 117 | 218 | 335 | 58 | $67 \%$ | 720 | 1,393 |
| New York | 97 | 548 | 432 | 980 | 101 | 385 | 542 | $9 \% 7$ | 317 | 4,092 | 4,576 | 8,668 |
| New Jersey | 20 | 114 | 194 | 308 | 19 | 100 | 359 | 459 | 86 | 695 | 1,383 | 2,078 |
| Pennsylvania | 50 | 638 | 318 | 956 | 46 | 318 | 616 | 931 | 31.2 | 2,750 | 3, 347 | 6,69\% |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Delaware | 1 | 25 |  |  |  |  |  |  | 12 | 187 | 289 | 476 |
| Maryland | 28 | 210 | 195 | 405 | 11 | 126 | 164 | 290 | 49 | 935 | 1,126 | 2,061 |
| District of Col | 4 | 106 | 22 | 128 |  |  |  |  | 4 | 253 | 362 | , 615 |
| Virginia | 18 | 85 | 110 | 195 | 2 |  | 7 | 9 | 37 | 416 | 615 | 1,031 |
| West Virginia | 4 | 25 | 31 | 56 | 5 | 44 | 52 | 99 | 21 | 91 | 210 | 301 |
| North Carolina |  |  |  |  | 1. | 8 | 7 | 15 | 9 | 103 | 142 | 245 |
| South Carolina | 7 | 49 | 33 | 8\% | 9 | 56 | 119 | 175 | 45 | 281 | 406 | 687 |
| Georgia | 31 | 108 | 190 | 298 | 21 | 81 | 165 | 246 | 68 | 484 | 741 | 1,295 |
| Florida | 9 | 18 | 36 | 54 | 4 | 11 | 27 | 38 | 16 | 65 | 160 | $2 \% 5$ |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky -....-.-...- | 25 | 154 | 204 | 378 | 19 | 81 | 154 | 235 | 49 | 535 | 547 | 1, 082 |
| Tennessee | 18 | 91 | 131 | 293 | 15 | 107 | 141 | 248 | 84 | 518 | 653 | 1, 171 |
| Alabama | 24 | 74 | 155 | 299 | 13 | 43 | 80 | 133 | 52 | 344 | 464 | 808 |
| IVississipp | 16 | 35 | 63 | 98 | 10 | 62 | 92 | 154 | 89 | 608 | 803 | 1,411 |
| Iouisiana | 4 | 7 | 23 | 30 | 3 | 19 | 3: | 51 | 27 | 230 | 457 | 687 |
| Texas | 78 | 297 | 492 | 789 | 26 | 135 | 194 | 329 | 206 | 1, 711 | 2,333 | 4,043 |
| Arkansas | 9 | 61 | 102 | 163 | 6 | 32 | 30 | 62 | 36 | 284. | 395 | 679 |
| Oklahoma | 1 | , |  | 1 |  |  |  |  | 5 | 30 | 57 | 87 |
| Indian Territory | 1 | 4 |  | 4 | 1 | 4 |  | 4 | 3 | 11 | 1 | 12 |
| North Central Division: $\quad$ N0 |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio... | 76 | 484 | 466 | 950 | 138 | 7021 | 1,089 | 1,791 | 5.5 | 3, 466 | 4, 66\% | 8, 128 |
| Indiana | 39 27 | 197 | 235 | 422 378 | 19 | $13 \%$ | 182 | + 319 | 261 318 | 2, 164 | 2,793 | 4, 888 |
| Michis | 27 | $23 \%$ | 146 | 373 | 79 | 456 | 8\%2 | 1,278 | 318 | 2,716 | 3,798 | 6,514 |
| Michigan | 15 | 112 | 46 | 158 | 35 | 185 | 213 | 398 | 278 | 1,901 | 2,804 | 4, 4 , 215 |
| Minnesota | 8 | $\bigcirc 0$ | 43 | 103 | 18 | 91 | 184 | 10 | - 98 | 1,392 | 1,323 | 3,315 2,158 |
| Iowa. | 13 | 49 | 73 | 122 | 83 | 480 | 737 | 1,21\% | 317 | 2,23\% | 3,373 | 5,610 |
| Missouri | 20 | 166 | 265 | 431 | 12 | 78 | 12: | 200 | 175 | 1,460 | 2,205 | 3, 665 |
| North Dakota | 1 | 2 |  | 2 | 2 | 5 | 14 | 19 | $2 \%$ | 70 | 105 | 176 |
| South Dakota | 2 | 11 | 13 | 24 | 7 | 30 | 35 | 65 | 41 | 254 | 307 | 561 |
| Nebraska | 16 | 82 | 131 | 218 | 14 | 97 | 165 | 20.2 | 221 | 1,419 | 2,259 | 3, 678 |
| Kansas | 8 | 52 | 55 | 107 | 27 | 161 | 209 | 370 | 186 | 1,389 | 2,135 | $3,5 \% 4$ |
| Western Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana --.... | 4 | 15 | 12 | 27 | 2 | 7 | 21 | 28 | 15 | 95 | 158 | 253 |
| Wyoming | 2 | 12 | 1 | 16 |  |  |  |  | 6 | 28 | 32 | 60 |
| Colorado | 13 | 134 | 89 | 223 | 8 | 96 | 151 | 247 | 38 | 518 | 670 | 1,188 |
| New Miexico | 2 | 6 | 4 | 10 | 1 |  | 6 | 6 | 3 | 4 | 17 | 21 |
| Arizona . | 1 | 6 | 9 | 15 |  |  |  |  | 2 | 9 | 16 | 25 |
| Utah | 2 | 54 | 31 | 85 | 1 | 49 | 23 | 69 | 2 | 85 | 83 | 168 |
| Nevada | 1 | 1 |  | 1 | 2 | 2 | 8 | 10 | 8 | 85 | 154 | 239 |
| Idaho. | 1 | 4 | 3 | 7 | 3 | 11 | 18 | 29 | 6 | 21 | 33 | 54 |
| Washington | 3 | 12 | 16 | 28 | 2 | 5 | 15 | 20 | 29 | 214 | 356 | 570 |
| Oregon | 4 | 31 | 23 | 54 | 4 | 35 | 41 | 76 | 13 | 212 | 272 | 484 |
| California | 48 | 221 | 146 | 367 | 3 | 25 | 35 | 60 | 96 | 1,039 | 1,364 | 2,403 |

Table 6.-Public high schools-Number of secondary students pursuing certain studies in 1899-1900.

| State or Territory. | Chemistry. |  |  |  | Physical geography. |  |  |  | Geology. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { ت⿹\zh26灬 } \\ & \text { E } \end{aligned}$ |  |  |  |  |  | $\stackrel{\dot{\oplus}}{\stackrel{\rightharpoonup}{7}}$ |  | E- |
| United Stat | 1,971 | 17, 794 | 22, 290 | 40,081 | 4,794 | 51,028 | 70,307 | 121,335 | 1,168 | 7,624 | 11, 119 | 18, \%43 |
| North Atlantic Divisio | 65.2 | 6,447 | 7,634 | 14, 081 | 1,146 | 12, 857 | 17,409 | 30,266 | 518 | 3,261 | 4,865 | 8,126 |
| South Atlantic Division | 90 | 947 | 1,309 | 2,256 | 347 | 3,052 | 4,551 | 7,603 | 36 | 259 | 391 | 850 |
| South Central Division | 158 | -962 | 1,568 | 2\%, 330 | 494 | 5, 731 | 7,777 | 13,511 |  | 901 | 1,325 | 2,226 |
| North Central Division | 917 | 7,887 | 9,931 | 17, 818 | 2,62\% | 26,924 | 37,220 | 64, 144 |  | 2,800 | 3,912 | 6,712 |
| Western Division... | 151 | 1,551 | 1,818 | 3,399 | 185 | 2,461 | 3,350 | 5,811 | 50 | 403 | 6:2 | 1, $0: 29$ |
| North Atlantic Division: Maine | 76 | 429 | 493 | 922 | 105 | 707 | 795 | 1,502 | 64 | 314 | 388 | 702 |
| New Hamps | 27 | 196 | 196 | 392 | 39 | 259 | 220 | 529 | 22 | 128 | 127 | 255 |
| Vermont | $\stackrel{2}{2}$ | 76 | 97 | 173 | 45 | 414 | 487 | 901 | 23 | 101 | 125 | 1,226 |
| Massachuset | 175 | 1,957 | 2, 492 | 4, 449 | 137 | 1,275 | 1,640 | 2,915 | 111 | 577 | 922 | 1,493 |
| Rhode Island | 10 | 166 | 158 | 324 | 15 | 161 | 146 | 307 | 7 | 17 | 34 | 51 |
| Connecticut. | 34 | 317 | 470 | $78 \%$ | 47 | 831 | 1,024 | 1,855 | 27 | 168 | 279 | 447 |
| New York. | 177 | 1,806 | 1,574 | 3,380 | 343 | 4,436 | 6,190 | 10,626 | 180 | 959 | 1,498 | 2,457 |
| New Jersey | 48 | 1 394 | ${ }^{783}$ | 1,177 | ${ }^{71}$ | ${ }^{971}$ | 1,588 | 2,559 | 19 | 166 | , 373 | 509 |
| Pennsylvania | 82 | 1,106 | 1,371 | 2,477 | 314 | 3,803 | 5,269 | 9,072 | 65 | 831 | 1,119 | 1,950 |
| South Atlantic Division: | 4 | 55 |  | 124 | 11 | 129 | 191 |  |  |  |  |  |
| Maryland | 11 | 280 | 166 | 446 | 36 | 310 | 42iz | 732 | 3 | 47 | 3 | 50 |
| District of Colv | 4 | 143 | 150 | 293 |  |  |  |  |  |  |  |  |
| Virginia | 20 | 131 | 256 | 357 | 52 | 608 | 899 | 1,507 | 3 | 39 | 15 | 5 |
| West Virginia | 8 | 56 | 84 | 140 | 32 | 271 | 419 | 690 | 4 | 12 | 35 | 47 |
| North Carolina | 1 | 15 |  | 22 | 16 | 129 | 199 | 328 |  |  |  |  |
| South Carolina | 4 | 21 | 79 | 100 | 85 | 696 | 923 | 1,619 | 6 | 36 | 50 | 86 |
| Georgia | 31 | 181 | 385 | 566 | 84 | 740 | 1,162 | 1,902 | 16 | 109 | 265 | 374 |
| Florida | 7 | 65 | 113 | 178 | 31 | 169 | 336 | 505 | 3 | 13 | 23 | 6 |
| South Central Division: |  | 190 | 272 | 462 | 49 | 625 | fris | 1,263 | + | 83 | 114 | 97 |
| Tennesse | 17 | 143 | 194 | 337 | 55 | 600 | 841 | 1,441 | 43 | 326 | 379 | 705 |
| Alabama | 19 | 61 | 164 | 225 | 33 | 353 | 515 | 1,868 | 14 | 7\% | 186 | 263 |
| Mississippi | 18 | 59 | 79 | 188 | 64 | 601 | 975 | 1,576 | 12 | 108 | 109 | 217 |
| Louisiana | 12 | 130 | 25: | 38. | 24 | 374 | 576 | 950 | 3 | 24 | 38 | 62 |
| Texas. | 58 | 318 | 52 | 838 | 216 | 2,594 | 3,469 | 6,063 | 33 | 219 | 396 | 615 |
| Arkansas | 9 | 41 | 58 | 102 | 45 | 433 | 664 | 1,162 | 7 | 54 | 99 | 153 |
| Oklahoma | 3 | 17 | 29 | 46 | 5 | 59 | 91 | 150 | 1 |  | 4 |  |
| Indian Territory |  |  |  |  | 3 | 30 | - 8 | 38 | , |  |  | 8 |
| North Central Division: Ohio | 137 | 1,235 | 1,606 | 2,831 | 588 | 5,458 | 6,860 | 12,318 | 99 | 586 | 751 | 1,337 |
| Indiana | 95 | 923 | 1,051 | 1,974 | 305 | 2,968 | 3, 703 | 6,671 | 31 | 22 | 241 | 466 |
| Illinois | 147 | 1,285 | 1,572 | 2,857 | 281 | 3, 787 | 6, 196 | 9,983 | 47 | 286 | 641 | 927 |
| Michigan | 172 | 1,3:9 | 1,522 | 2,851 | 250 | $\stackrel{2}{2} 546$ | 3,350 | 5,896 | 59 | 334 | 408 | ${ }^{7} 42$ |
| Wisconsin | 33 | 316 | 332 | ${ }^{6} 618$ | 202 | 2,825 | 3,839 | 6,664 | 14 | 130 | 176 | 306 |
| Minnesot | 73 | 553 | 764 | 1,317 | 33 | 263 | 356 | 619 | 8 | 68 | 99 | 167 |
| Iowa. | 63 | 531 | 685 | 1,216 | 302 | 2,947 | 4,096 | 7, 043 | 74 | 538 | 660 | 1,198 |
| Missouri | 59 | 648 | 846 | 1,494 | 186 | 1,825 | 2,519 | 4,344 | 30 | 212 | 30\% | 514 |
| North Dako | 2 | 18 | 20 | 38 | 18 | 77 | 154 | 231 | 4 | 10 | 23 | 33 |
| South Dak | 11 | 59 | 61 | 120 | 54 | 358 | 533 | 891 | 10 | 51 | 63 | 114 |
| Nebraska | 73 | 590 | 921 | 1,511 | 211 | 2,039 | 3,019 | 5,058 | 15 | 106 | 189 | 295 |
| Kansas | 52 | 410 | 551 | 961 | 159 | 1, 831 | 2,595 | 4, 426 | 45 | 254 | 359 | 613 |
| Western Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana |  | 61 | ${ }_{10}^{65}$ |  | 18 |  |  | 429 | 6 | 36 | 69 | 105 |
| Colorad | 35 | 365 | 537 | 902 | 30 | 416 | 551 | 967 | 1 |  | 3,7 | 531 |
| New Mexi |  |  |  |  |  | 62 | 69 | 131 | 2 |  | 13 | 21 |
| Arizona | 1 |  |  | 15 | 2 | 19 | 39 |  |  |  |  |  |
| Utah. | 2 | 18 | 15 | 33 | 5 | 114 | 116 | 239 |  | 27 | 46 | 73 |
| Nevada | 8 | 59 | 99 | 158 | 6 | 66 | 110 | 176 | 1 | 5 | 8 | 13 |
| Idaho | 2 | 11 | 13 | 21 | - | 97 | 126 | 223 | 3 | 13 | 15 | 28 |
| Washing |  | 94 | 146 | 240 | 45 | 509 | 815 | 1,321 | 6 | 45 | 55 | 100 |
| Oregon Californi | 82 | 86 894 | 125 | 1, 211 | 16 42 | 303 662 | 355 863 | 1 658 | 4 5 | [33 | 43 50 | 76 88 8 |
|  |  |  |  |  |  |  |  | 1, |  |  |  | 8 |

Table 7．－Public high schools－Number of secondary students pursuing certain studies in 1899－1900．

| State or Territory． | Physiology． |  |  |  | Psychology． |  |  |  | Rhetoric． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { जुं } \\ & 0 \\ & \text { E- } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { ※ } \\ & \text { Ti } \\ & 0 \\ & \text { E } \end{aligned}$ |  | $$ |  | $\begin{aligned} & \text { ت⿹勹巳一 } \\ & \text { © } \\ & \text { E } \end{aligned}$ |
| United States | 4，523 | 60， 546 | 81， 835 | 142， 401 | 884 | 4，532 | 7，836 | 12，368 | 5，19 | 81，023 | 118，781 | 109， 803 |
| North Atlantic Division | 1，061 | 18， 481 | \％ 4,465 | 42，946 | 118 | 496 | 1，248 | 1，74 | 1，262 | 27，589 | 36,851 | 6t， 440 |
| South Atlantic Division | 329 | 3，431 | 5，220 | 8，651 | 50 | 243 | 533 | 776 | 373 | 3， 557 | 6，558 | 10， 115 |
| South Central Division | 577 | 7， 794 | 10， 683 | 17， 877 | 193 | 1．090 | 1，518 | 2，608 | 600 | 6， 408 | 10， 469 | 16， 877 |
| North Central Division | 2， 469 | 29，613 | 40， 148 | 69，761 | 503 | 2，570 | 4，284 | 6，854 | 2， 735 | 38，239 | 56， 997 | 95，236 |
| Western Division．．．－． | 97 | 1，212 | 1，919 | 3，166 | 21 | 133 | 253 | 386 | 203 | 5，229 | 7，903 | 13，135 |
| North Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| New Hampshi | 31 | 170 | $20 \%$ | 372 | 4 | 15 | 19 | 34 | 51 | 1， 642 | 1， 741 | 1，386 |
| Vermont．．． | 29 | 297 | 350 | $67 \%$ | 18 | 50 | 106 | 156 | 51 | 458 | 687 | 1，145 |
| Massachusett | 1033 | 2，277 | 3，162 | 5， 439 | 11 | 83 | 191 | 274 | 215 | 7，496 | 9，942 | 17， 438 |
| Rhode Island | 10 | 31 | 113 | 147 | 4 | 1 | 62 | 63 | 16 | 828 | 1，053 | 1，881 |
| Connecticut | 34 | 299 | 393 | 692 | 3 | 10 | 21 | 31 | 65 | 1，330 | 1，725 | 3，055 |
| New York | 363 | 9，258 | 11，148 | 20， 306 | 17 | 59 | 235 | 294 | 320 | 9，079 | 9，741 | 18， 820 |
| New Jersey | 63 | 1，0¢0 | 1，749 | 2，809 | 7 | 19 | 88 | 107 | 86 | 1，592 | 2，769 | 4，361 |
| Pennsylvania | 282 | 4，374 | 6，603 | 10，977 | 59 | 154 | 412 | 606 | 325 | 4，992 | 8，653 | 13， 645 |
| South Atlantic Division： <br> Delaware | 11 | 203 |  |  | 2 |  | 20 | ， | 13 | $14 \%$ | 237 | 394 |
| Maryland | 47 | 600 | 1，198 | 1，858 | 5 | 28 | 130 | 138 | 38 | 405 | －69\％ | 1，102 |
| District of Columbia |  |  |  |  |  |  |  |  | 3 | 430 | － 905 | 1，395 |
| Virginia | 58 | 638 | 872 | 1，509 | 2 | 3 | 37 | 40 | 61 | 649 | 1，139 | 1，788 |
| West Virgi | 23 | 240 | 389 | 629 | 7 | 36 | 49 | 85 | 29 | 200 | 376 | 576 |
| North Carolin | $1 \%$ | 119 | 145 | 264 |  |  |  |  | 17 | 131 | 185 | 316 |
| South Caro | 68 | 525 | 863 | 1，388 | 6 | 33 | 92 | 125 | 83 | 571 | 731 | 1，302 |
| Georgia | 74 | 735 | 910 | 1，645 | 15 | 87 | 85 | 172 | 102 | 830 | 1，842 | 2，6\％\％ |
| Florida | 29 | 312 | 534 | 846 | 13 | 54 | 120 | 174 | 28 | 194 | 386 | 580 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 54 | 759 | 868 | 1，62\％ | 21 | 184 | 281 | 465 | 64 | 911 | 1，797 | 2，708 |
| Tennessee | 89 | 1，008 | 1，195 | 2，203 | 17 | 85 | 110 | 193 | 91 | 796 | 1，224 | 2，020 |
| Alabama | 52 | $7 \% 1$ | 1，066 | 1，837 | 13 | 64 | 64 | 128 | 53 | 541 | 1，072 | 1，613 |
| Mississipp | 88 | 832 | 1，248 | 2，080 | 10 | 23 | 66 | －89 | 84 | 545 | 880 | 1，425 |
| Louisiana | 27 | 428 | 605 | 1，033 | 6 | 31 | 43 | 74 | 29 | 441 | 907 | 1，318 |
| Texas | 805 | 3，225 | 4，167 | 7，39： | 108 | 610 | 844 | 1，454 | 216 | 2，548 | 3， 698 | 6，246 |
| Arkansa | 54 | 680 | 878 | 1，568 | 11 | 80 | 94 | 174 | 54 | 530 | 740 | 1，270 |
| Oklahoma | 4 | 30 | 39 | － 69 | 2 | 7 | 13 | － 20 | 6 | 77 | 145 | 222 |
| Indian Territory | ， | 51 | $1 \%$ | 68 | ， | 6 | 3 | 9 | 3 | 19 | 6 | 25 |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio | 605 | 6， 879 | 8，567 | 15， 446 | 85 | 460 | 762 | 1，203 | 549 | 5，985 | 8，183 | 11， 168 |
| Indiana | 175 | 1， 719 | 2，176 | 3，895 | 58 | 410 | 581 | 991 | 341 | 5， 617 | 7， 757 | 13， 374 |
| Illinois | 305 | 5， 073 | 7，348 | 12，421 | 24 | 113 | 211 | 324 | 308 | 5，654 | 9，192 | 14， 846 |
| Michigan | 20.3 | 2，733 | 3，699 | 6，432 | 45 | 258 | 437 | 695 | 269 | 3，653 | 5，441 | 9，094 |
| Wisconsin | 218 | 2， 167 | 2， 986 | 5， 153 | 148 | 621 | 937 | 1，558 | 172 | 1，946 | 2，798 | 4，744 |
| Minneso | 61 | 708 | 1，036 | 1，744 | 3 | 22 | 57 | 79 | 99 | 2，390 | 3，354 | 5，744 |
| Iowa | 281 | 3，297 | 4，610 | 7，907 | 21 | 94 | 194 | － 288 | 319 | 3， 893 | 6， 050 | 9，943 |
| Missouri | 169 | 2，500 | 3，313 | 5，813 | 57 | 246 | 602 | 898 | 212 | 3， 361 | 5，324 | 8，685 |
| North Dak | 22 | 123 | 189 | 312 | 1 |  | 10 | 11 | 27 | 207 | （283 | 490 |
| South Dak | 44 | 553 | 503 | 856 | 2 | 5 | 11 | 16 | 51 | 358 | － 537 | 889 |
| Nebraska | 1.2 | 2，286 | 3， 061 | 5，287 | 8 | 33 | 54 | 87 | 200 | 2， 796 | （ 4，14\％ | 6，938 |
| Kansas | $15:$ | 1，835 | 2， 660 | 4，495 | 50 | 257 | 428 | 683 | 188 | 2，385 | 3，936 | 6，321 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Wyoming | 3 | 38 | 52 | 90 |  |  |  |  | 4 | 38 | 55 | 93 |
| Colorado | 18 | 179 | $3 \%$ | 549 | 8 | 82 | 158 | 240 | 39 | 1，056 | 1，603 | 2，659 |
| New Mexico | $r$ | 35 | 60 | 95 | 1 | 1 | 1 | 2 | 6 | 21 | － 45 | 66 |
| Arizona | 2 | 21 | 44 | 65 |  |  |  |  | 2 | 12 | 29 | 41 |
| Utah | 4 | 53 | 65 | 118 | 2 | 13 | 31 | 47 | 4 | 83 | 134 | 216 |
| Nevada | 5 | 28 | 49 | 77 | 1 |  | 3 | 3 | 9 | 74 | 118 | 192 |
| Idaho | 6 | 70 | 90 | 160 |  |  |  |  | 7 | 59 | 56 | 115 |
| Washing | 14 | 173 | 275 | 448 | 5 | 19 | 39 | 58 | 36 | 276 | 489 | 765 |
| Oregon | 12 | 231 | 300 | 531 |  |  |  |  | 13 | 241 | 429 | 670 |
| California | 16 | 816 | 476 | 792 |  |  |  | 36 | 84 | 3， 134 | － 4,567 | 7，701 |

Table 8.-Public ligh schools-Number of secondary students pursuing certain studies in 1899-1900.


Table 9.-Public high schools-Proportion of male and female students, per cent of students pursuing certuin courses, per cent of graduates, etc., in 1890-1900.

| State or Territory. | Total secondary students. | Per cent of total number. |  |  |  |  | $\begin{aligned} & \text { Per cent } \\ & \text { of grad } \\ & \text { mates } \\ & \text { preparcd } \\ & \text { for } \\ & \text { college. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | College classical preparatory students. | College scientific preparatory students. | Graduates in 1900. |  |
| United States ...--- | 519, 251 | 41.64 | 58.36 | 6.02 | 4.80 | 11.89 | 20. 28 |
| North Atlantic Division | 169, 405 | 43. 29 | 56.71 | 7. 70 | 3. 72 | 12.08 | 25. 32 |
| South Atlantic Division | 2', 013 | 39.07 | 60.93 | 7. 16 | 2.37 | 10.71 | 25.83 |
| South Central Division | 39,669 | 40.54 | 59.45 | 7.78 | 4.49 | 9.61 | 35.53 |
| North Central Division | 254,816 | 41. 20 | 58.80 | 4.59 | 5.25 | 12.32 | 32.02 |
| Western Division | 28,348 | 39.72 | 60.28 | 5.34 | 9.92 | 11.25 | 42.62 |
| North Atlantic Division: |  |  |  |  |  |  |  |
| New Hampshire -- | 3,704 | 43.25 | 56.75 | 7.26 | 4. 72 | 15.55 | 23.61 |
| Vermont.------ | 3,438 | 68.11 | 56.89 | 4.63 | 8.44 | 11.20 | 34.20 |
| Massachusett | 35, 914 | 43.73 | 56.27 | 13.57 | 4. 66 | 14.79 | 25. 78 |
| Rhode Island | 3,450 | 42.78 | $5 \% .22$ | 7.59 | 3.19 | 11.59 | 33.50 |
| Connecticut | 8,107 | 43.41 | 56.59 | 8.07 | 5. 23 | 13.47 | 23. 81 |
| New York. | 62,306 | 45.53 | 53.47 | 6. 41 | 3.43 | 8.30 | 32.07 |
| Now Jersey | 11,250 | 37.76 | 62.81 | 5.7\% | 3.03 | 13.19 | 17.31 |
| Pennsylvania -------. | 32, 387 | 38.40 | 61.60 | 3. 43 | 2.59 | 14.98 | 19.27 |
| South Atlantic Division: <br> Delaware | 1,052 | 38.21 | 61.79 | 3.99 | 3. 71 | 15.11 | 22.01 |
| Maryland | 3, 956 | 43.48 | 56.52 | 2.35 | 1. 19 | 11.20 | 16.48 |
| District of Columbia | 3.431 | 38.27 | 61.73 | 3.96 | 2.91 | 10.43 | 16. 20 |
| Virginia - | 4,330 | 36.86 | 63.14 | 5.84 | 1.41 | 10.18 | 15.87 |
| West Virginia | 1,955 | 34.02 | 65.98 | 4.76 | 1.48 | 12.07 | 21.19 |
| North Carolina | 1943 | 42.95 | 57.05 | 7.00 | 0.64 | 9.76 | 59.78 |
| South Carolina | 3,998 | 42.85 | 57.65 | 14.01 | 3. 45 | 10.96 | 38.58 |
| Georgia | 5, 845 | 37.67 | 62.33 | 10.93 | 2. 86 | 10. 21 | 37.59 |
| Florida | 1,503 | 37.06 | 62.94 | 3.46 | 3.53 | 8.52 | 10.16 |
| South Central Division: |  |  |  |  |  |  |  |
| Tennessee | 5, 42\% | 40.00 | 60.00 | 6.79 | 4.59 | 13.70 | 24.36 |
| Alabama. | 3,817 | 38.72 | 61.28 | 6.68 | 5.13 | 6. 21 | 28.27 |
| Mississipp | 4,052 | 39.93 | 60.07 | 14.96 | 5.01 | 7.97 | 48.92 |
| Louisiana | 2,215 | 36. 75 | 63.25 | 2.80 | 4.06 | 15.21 | 28.78 |
| Texas | 14,929 | 40.71 | 59.29 | 7.43 | 4. 26 | 8.67 | 39.95 |
| Arkansas | 3,294 | 42.52 | 57.48 | 7.91 | 3.07 | 9.00 | 29.31 |
| Oklahoma.-...-. | 336 | 34.82 | 65.18 | 3.27 | 3.87 | 8.33 | 60.71 |
| Indian Territory | 157 | 73.34 | 21.66 | 5.10 | 0.00 | 2.55 | 0.00 |
| North Central Division: |  |  |  |  |  |  |  |
| Indiana | 26,415 | 43.34 | 57. 66 | 5. 30 4.27 | 4.18 | 12.17 | 26.13 |
| Illinois | 37, 446 | 39.18 | 60.82 | 4.38 | 4.67 | 12.27 | 29.04 |
| Michigan. | 28,811 | 42.16 | 57.81 | 3.22 | 5. 52 | 11.57 | 36.98 |
| Wiscon ${ }^{\text {in }}$ | 20,626 | 42.42 | 57.58 | 4.32 | 4.02 | 12.90 | 27.44 |
| Minnesous | 12,319 | 40.78 | 59.22 | 2.99 | 14.09 | 11.91 | $5 \frac{1}{ \pm} .16$ |
| Iowa | 29,022 | 40.57 | 59.43 | 4.79 | 5.46 | 12.91 | 30.61 |
| Missouri | 20,606 | 39.83 | 60.17 | 4.37 | 4.11 | 10.40 | 29.32 |
| North Dakota | 1,130 | 39.12 | 60.88 | 9.12 | 8.94 | 10.63 | 57.50 |
| South Dakota | 2,617 | 42.45 | 57.55 | 6.08 | 7. 76 | 13.41 | 40.17 |
| Nebrask | 15,208 | 39.80 | 60.20 | 4.85 | 8.00 | 12.99 | 33.92 |
| Kansas .-...... | 14,913 | 39.36 | 60.64 | 6.77 | 5.14 | 12.26 | 46.80 |
| Western Division: ${ }^{\text {W }}$ ( ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| W yoming | 1, 357 | 43.42 | 56.58 | 5.04 | 3.08 | 14.29 | 45.10 |
| Colorado | 5,910 | 39.54 | 60.46 | 5.96 | 10.68 | 9.93 | 45. 66 |
| New Mexico | 243 | 41.15 | 58.85 | 7.89 | 10. 29 | 7.00 | 52.94 |
| Arizona | , 172 | 33.14 | 66.86 | 2.33 | 15.12 | 15.70 | 25.93 |
| Utah | 1,115 | 44.04 | 55.96 | 6. 73 | 4.13 | 9.96 | 26.13 |
| Nevada | 431 | 38.05 | 61.95 | 10. 44 | 4.87 | 15.55 | 43.28 |
| Idaho. | 486 | 44.44 | 55.56 | 3.70 | 4.73 | 11.11 | 20.37 |
| Washington | 3,463 | 38.29 | 61.71 | 5. 46 | 4. 59 | 11. 03 | 48.17 |
| Orogon Califol -... | 1,916 | 38.78 | 61.22 | 7.88 | 5. 79 | 12.37 | 18.99 |
| California_ | 12,620 | 39.86 | 60.14 | 4.54 | 12.33 | 11.80 | 46.34 |

Table 10.-Pubiic high schools--Percentages of secondarystudents pursuing certain studies in 1899-1900.

| State or Territory. | Per cent of total secondary students. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Latin. | Greek. | French. | German. | Algebra. | Geometry. | $\begin{aligned} & \text { Trigo- } \\ & \text { nom- } \\ & \text { etry. } \end{aligned}$ | As-tronomy. | $\begin{gathered} \text { Physs } \\ \text { ics. } \end{gathered}$ |
| United States | 50.61 | 2.85 | 7.78 | 14.33 | 56.29 | 27.39 | 1.91 | 2. 78 | 19.04 |
| North Atlantic Division .. | 47.38 | 5.90 | 16.82 | 17.82 | 50.77 | 25.56 | 1.76 | 3.31 | 17.45 |
| South Atlantic Division .- | 64.24 | 2.18 | 8.91 | 10. 76 | 69.64 | 31.29 | 4.60 | 3.22 | 2.42 |
| South Central Division. | 56.48 | 1.80 | 4.52 | 4.89 | 71.83 | 31.24 | 4.83 | 3.04 | 25.16 |
| North Central Division. | 50.15 | 1.12 | 2.33 | 14.00 | 55.50 | 26.08 | 1. 16 | 2.43 | 15.43 |
| Westerin Division | 52.74 | 2.38 | 6.21 | 13.05 | 61.92 | 35.05 | 2.94 | 1.92 | 19.28 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine | 41.40 | 10. 79 | 19.41 | 1.43 | 51.53 | 28.19 | 0.47 | 8.53 | 18. 16 |
| New Hamp | 44.18 | 9.36 5.99 | 30.18 | 5. 29 | 41.59 | 24.58 | 0.89 | 6. 29 | 1. 20 |
| Miassachuset | 46.015 | 9.25 | 39.95 | 11. 69 | 47.17 | 30.73 | 1.35 | 4.59 | 19.80 |
| Rhode Island | 45. 77 | 11.28 | 27.01 | 13.88 | 50.95 | 30.35 | 1.48 | 2.67 | 2.5.39 |
| Connecticut | 52. 55 | 6. 66 | 14.39 | 17.47 | 52. 19 | 27.19 | 1.49 | 4.13 | 17.18 |
| New York | 42.62 | 4.36 | 1).92 | 23.27 | 41.66 | 21.39 | 1.57 | 1.49 | 13.90 |
| New Jersey | 42.55 | 3.69 | 6.95 | 31.97 | 65.88 | 24.03 | 2. 74 | 4.68 | 12.45 |
| Pennsylvania | 56. 59 | 3.41 | 2.91 | 16.86 | 67.27 | 31.61 | 2.95 | 2.88 | 20.68 |
| South Atlantic Division: | 86.83 | 0.00 | 1.24 | 4.47 | 69.39 | 34.98 | 2.38 | 0.00 |  |
| Maryland | 72.53 | 2.83 | 8.54 | 30.59 | 79.68 | 68.53 | 10.24 | 7.33 | 5. 10 |
| District of | 40.65 | 2.87 | 17. 2 | 18.65 | 32. 09 | 19.41 | 3.73 | 0.00 | 17.92 |
| Virginia | 63.63 | 0.28 | 10.21 | 12.56 | 68.29 | 21.94 | 4.50 | 0.16 | 23.81 |
| West Virgi | 43.17 | 0.20 | 0.09 | 7.01 | 70.13 | 27.83 | 2.86 | 5.06 | 15.40 |
| North Carolina | \% 3.91 | 0.21 | 1.59 | 0.00 | 69.25 | 21.10 | 0.00 | 1.59 | 25.98 |
| South Caro | 66. 28 | 1.98 | 11.68 | 3.78 | \%6.11 | 18.28 | 2.05 | 4.38 | 17.18 |
| Georgia | 73.08 | 4.88 | 8.16 | 2.31 | 83.15 | 31.43 | 5.10 | 4.21 | 20.96 |
| Florida | 44.24 | 0.00 | 3.19 | 2. 79 | 62.94 | 21.09 | 3.59 | 2.53 | 14.97 |
| South Central Division: | 59.96 | 4.04 | 3.50 | 17.47 | 66.83 | 28.97 | 6.85 | 3 | 19.61 |
| Tennessee | 59. \% | 2.05 | 2.10 | 2.19 | 68.25 | 29. 49 | 4. 09 | 4.57 | 21.60 |
| Alabama | 56. \% | 1.78 | 3. $\%$ | 2.04 | \%1.99 | 33.77 | 6. 00 | 3.22 | 21.17 |
| Mississipp | 57.28 | 3.41 | 0.49 | 0.30 | 69.72 | 15.45 | 2.42 | 3.80 | 34.82 |
| Louisian | 73.32 | 0.45 | 52.46 | 0.00 | 7. 20 | 35.01 | 1.35 | 2.30 | 31.02 |
| Texas | 52.43 | 0.91 | 0.61 | 4.29 | 75.35 | 35. 79 | 5. 29 | 2.21 | 27.09 |
| Arkans | 60.52 | 0.84 | 2.11 | 3.54 | 70.60 | \%5.99 | 5.06 | 1.9* | 21.06 |
| Oklahoma | 89.29 | 0.60 | 0.00 | 3.28 | 69.94 | 29.17 | 0.60 | 0.00 | 25. 89 |
| Indiau Territory | 35.67 | 0.00 | 0.00 | 0. 00 | 40.13 | 7.64 | 2.55 | 2.55 | 7.64 |
| North Central Division: | 51.03 | 1.61 | 2.20 | 12.6\% | 57.61 |  | 2.08 |  |  |
| Indiana | 65. 39 | 0.30 | 0.83 | 12.41 | 59.2 | 27.78 | 1. 60 | 1.21 | 18.50 |
| Illinois | 51.63 | 1.33 | 5.15 | 16.20 | 50.68 | 25.95 | 1.00 | 3.41 | 17.40 |
| Michigan | 33.34 | 1.51 | 3.49 | 15.64 | 52.19 | 20.02 | 0.55 | 1.38 | 16.50 |
| Wisconsi | 24. 71 | 0.89 | 0.17 | 23.89 | 41.61 | 22.27 | 0.50 | 0.05 | 16. 07 |
| Minneso | 66.69 | 0.78 | 6.38 | 19.02 | 48.47 | 31.97 | 0.33 | 2.23 | 17.53 |
| Iowa | 45.87 | 0.25 | 0.49 | 9.46 | 51.30 | 23.95 | 0.42 | 4.19 | 19.33 |
| Missouri | $5 \pm .09$ | 2.30 | 2.86 | 13.55 | 65.75 | 25.17 | 2.09 | 0.97 | 17.79 |
| North Dak | 77. 79 | 0.18 | 0.00 | 6.11 | 60.44 | 27.17 | 0.18 | 1.68 | 15.58 |
| South Dak | 41. 22 | 0.61 | 0.31 | 10.0. | 57. 09 | 24. 53 | 0.92 | 2. 48 | 21.44 |
| Nebrask | 59.75 | 0.64 | 1.26 | 10.27 | 66.39 | 38.67 | 1. 40 | 1. 72 | 24.18 |
| Kansas. | 58.83 | 0.85 | 0.17 | 10.29 | 63.11 | 27.70 | 0. $\mathrm{i}_{2}$ | 2.48 | 23.63 |
| Western Division: | 59.20 | 1.04 | 8.69 | 19.33 | 63.79 | 26.12 | 1.65 | 1.71 | 15.47 |
| Wyomin | 59.10 | 0.00 | 0.00 | 10.26 | 53.78 | 27.17 | 4.48 | 0.00 | 16.81 |
| Colorado | 64.89 | 3. $\uparrow 9$ | 8. \% 5 | 23.93 | 58.56 | 33.23 | 3. 77 | 4.18 | 20. 10 |
| New Mex | 43.21 | 0.00 | 0.00 | 1.65 | 69.96 | 1770 | 4.1\% | 2.47 | 8.64 |
| Arizona | 45.35 | 0.00 | 0.09 | 6. 40 | 53.49 | 29.07 | 8.72 | 0.00 | 14.53 |
| Utah | 41.52 | 0.00 | 3.14 | 18.65 | \%1. 48 | 52.56 | 7.62 | 6.19 | 15.07 |
| Nerad | 49.65 | 0.00 | 6.50 | 1.86 | 8.2. 13 | 38.98 | 0.23 | 2.32 | 55.45 |
| Idaho | 48.56 | 0.00 | 0.00 | 1.23 | 56.79 | ${ }^{23} .25$ | 1.44 | 5.97 | 11.11 |
| Washing | 42. 65 | 0.26 | 3.58 | 10.02 | 59.83 | 27.61 | 0.81 | 0.58 | 16.46 |
| Oregon | 32. 57 | 0. 00 | 0.00 | 12. 11 | 64.25 | 24.95 | 2.82 | 3.97 | 2.26 |
| Calitornia | 53.40 | 3.36 | 7.24 | 8.84 | 62.33 | 38.64 | 2.91 | 0.48 | 19.04 |

TAbLe 11.-Public high schools-Percentages of secondary students pursuing certain studies in 1899-1900.

| State or Territory. | Per cent of total secondary students. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chemistry. | Physical geography | Geology. | Physiology. | Psy-chology. | $\begin{aligned} & \text { Rheto- } \\ & \text { ric. } \end{aligned}$ | Eng- <br> lish <br> litera- <br> ture. | $\begin{aligned} & \text { His- } \\ & \text { tory. } \end{aligned}$ | Civics. |
| United States | 7.72 | 23.37 | 3.61 | 27.42 | 2.38 | 38.48 | 42.10 | 38.16 | 21.66 |
| North Atlantic Division | 8.31 | 17.87 | 4.80 | 25.35 | 1.03 | 38.04 | 45.82 | 39.25 | 16.80 |
| South Atlantic Division | 8.35 | 28.15 | 2.41 | 32.03 | 2.87 | 37.41 | 49.66 | 53.51 | 18.14 |
| South Central Division | 6.39 | 34.06 | 5.61 | 45.07 | 6.57 | 42.54 | 33.98 | 43.26 | 31.28 |
| North Central Division | 6.99 | 25.17 | 2.63 | 27.38 | 2.69 | 37.37 | 37.505 | 33.48 | 23.97 |
| Western Division | 11.99 | 20.50 | 3.63 | 11.17 | 1.36 | 46.33 | 64.96 | 51.83 | 19.85 |
| North Atlantic Division: Maine | 10.54 | 17.17 | 8.02 | 17.45 | 2.05 | 30.96 | 39.43 | 38.54 | 19.01 |
| New Hampshire | 10.58 | 14.28 | 6.88 | 10.04 | 0.92 | 37.42 | 44.49 | 42.14 | 9.91 |
| Vermont.-.-. | 5. 03 | 26.21 | 6.57 | 19. 69 | 4.51 | 33.30 | 29.99 | 36.65 | 23.27 |
| Massachus | 12.38 | 8.11 | 4.17 | 15. 13 | 0.76 | 48.51 | 74.14 | 53.57 | 11.83 |
| Rhode Island | 9.39 | 8.90 | 1.48 | 4.26 | 1.83 | 54.52 | 72.32 | 42. 61 | 8.99 |
| Connecticut | 9.71 | 22.88 | 5.51 | 8.54 | 0.38 | 3\%. 68 | 66.41 | 45.41 | 11.74 |
| New York | 5.42 | 17.04 | 3.94 | 32. 56 | $0.4 \tau$ | 30.18 | 26.73 | 29.46 | 15.19 |
| New Jersey | 10.45 | 22.73 | 4. $\% 9$ | 24.95 | 0.95 | 38.73 | 52.89 | 48.03 | 19.24 |
| Pennsylvania | 7.65 | 28.01 | 6.02 | 33.89 | 1.87 | 42.13 | 44.23 | 37.44 | 25.14 |
| South Ailantic Division: <br> Delaware | 11. 79 | 30.42 | 0.00 | 48.67 | 2.09 | 36.50 | 30.42 | 38.12 | 24.81 |
| Maryland | 11.27 | 18.50 | 1. 26 | 48.97 | 3.99 | 27.86 | 69.39 | 70.53 | 29.65 |
| District of Columbia | 8.54 | 0.00 | 0.09 | 0.00 | 0.00 | 40.66 | 92. 51 | 55.49 | 0.23 |
| Virginia | 8.94 | 34.80 | 1.25 | 34.85 | 0.92 | 41.29 | 36.81 | 54.78 | 15.45 |
| West Virginia | 7.16 | 35.29 | 2.40 | 82. 17 | 4.35 | 29.46 | 33.81 | 40.97 | 34.99 |
| North Carolin | 2.33 | 34. 78 | 0.32 | 28.00 | 0.00 | 33.51 | 46. 34 | 40.02 | 42.63 |
| South Carol | 2. 50 | 40.50 | 2.15 | 34.72 | 3. 13 | 32.57 | 41.30 | 59.63 | 15. 83 |
| Georroia | 9.68 | 32.54 | 6. 40 | \%8. 14 | 2.94 | 45.71 | 40.69 | 50. 50 | 12.83 |
| Florida ---.----- | 11.84 | 33.60 | 2. 40 | 56.29 | 11.58 | 38.59 | 30.47 | 38.12 | 21. 23 |
| South Central Division: Kentucky | 8.37 | 22.89 | 3.57 | 29. 49 | 8.43 | 49.08 | 38.21 | 47.07 | 23. 29 |
| Tennessce | 6.2\% | 26.58 | 13.00 | 40.63 | 8. 60 | 37.26 | 23.01 | 31.98 | 20. 30 |
| Alabama | 5.89 | 22. 74 | 6.89 | 48.13 | 3.35 | 42.26 | 44.77 | 34.71 | 20.62 |
| Mississipp | 3.41 | 38.89 | 5.36 | 51.33 | 2.20 | 35.17 | $3 \pm .70$ | 37.91 | 4.2. 00 |
| Louisiana | 17.25 | 42.89 | 2.80 | 45.64 | 3.34 | 60.86 | 54.94 | ro. 97 | 24.89 |
| Texas | 5. 61 | 40.61 | 4.12 | 49.51 | 9.74 | 41.81 | 29.73 | 47.50 | 35. 46 |
| Arkansas | 3.16 | 36. 04 | 4. 75 | 48.64 | 5.40 | 39.89 | 40.85 | 36.20 | 35.95 |
| Oklahoma | 13.69 | 44. 64 | 1. 79 | 20.54 | 5.95 | 66.07 | 8.33 | 25.00 | 51. 79 |
| Indian Territory | 0.00 | 21.80 | 5.10 | 43.31 | 5.73 | $15.9 \%$ | 3.18 | 35.67 | 20.38 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohio - - | 6.19 | 26.95 | 2.92 | 33. 79 | 2.67 | 30.99 | 36. 66 | 28.85 | 25.04 |
| Indiana | 7.47 | 2.20 | 1. 66 | 14.75 | 3.55 | 50.63 | 2.2. 56 | 39.24 | 22.51 |
| Illinois | 7.63 | 28.66 | 2. 48 | 33.17 | 0.87 | 39.65 | 55.39 | 33.58 | 18.15 |
| Michigan | 9.90 | 20.46 | 2.58 | 22.82 | 2.41 | 31.56 | 21. 23 | 36.50 | 19.94 |
| Wisconsin | 3.14 | 32.31 | 1.48 | 21.98 | 7.55 | 23.00 | 27.84 | 29.59 | 23.15 |
| Minnesot | 10.70 | 5.03 | 1.36 | 14.17 | 0.64 | 46.66 | 24.13 | 41.75 | 12.39 |
| Iowa | 4.19 | 24.27 | 4.13 | 27.24 | 0.99 | 34.26 | 31.53 | 31.50 | 27.16 |
| Missouri | 7.25 | 21.08 | 2.49 | 28.21 | 4.36 | 42.15 | 30.88 | 35.21 | 25.36 |
| North Dakota | 3.36 | 20.44 | 2.92 | 27.61 | 0.97 | 43.36 | 58.58 | 31.24 | 28.14 |
| South Dak | 4.59 | 34.05 | 4.36 | 32.71 | 0.61 | 33.97 | 29.50 | 32.71 | 37.71 |
| Nebrask | 9.94 | 33.26 | 1.94 | 34.76 | 0.57 | 45.68 | $4 \% .01$ | 36.90 | 32.95 |
| Kansas | 6.44 | 29.68 | 4.11 | 30.14 | 4. 59 | 42.39 | $35.2 \%$ | 28.18 | 33.36 |
| Western Division: |  |  |  |  |  |  |  |  |  |
| Montana | 7. 89 | 26.24 | 6. 12 | 11. 74 | 0.00 | 37.74 | 35.72 | 27.46 | 29.85 |
| Wyoming | 12. 04 | 25.21 | 0.00 | 25.21 | 0.00 | 26.05 | $59.1 \frac{1}{4}$ | 38.10 | 18.21 |
| Colorado | 15.26 | 16.36 | 8.98 | 9.29 | 4. 06 | 44.99 | 68.56 | 66.62 | 16.07 |
| New Mex | 0.00 | 53.91 | 8.64 | 39.09 | 0.83 | 27.16 | 28.40 | 33.33 | 21.40 |
| Arizona | 8.72 | 33. 72 | 0.00 | 37.79 | 0.10 | 23.84 | 53.19 | 29.65 | 37.79 |
| Utah | 2.96 | 20.63 | 6.55 | 10.58 | 4.22 | 19.37 | 19.64 | 42. 78 | 10.85 |
| Neva | 36.66 | 40.84 | 3.02 | 17.87 | 0. 70 | 41.55 | 74.71 | \%1.46 | 34.80 |
| Idaho | 4.94 | 45.88 | 5. 76 | 32.92 | 0.00 | 23.66 | 30.45 | 27.98 | 56.38 |
| Washington | 6. 93 | 38.23 | 2. 89 | 12. 94 | 1. 67 | 22.09 | 31.62 | 29.17 | 19.17 |
| Oregon | 11.01 | 34.34 | 3.97 | 27.71 | 0.00 | 34.97 | 31.73 | 48.38 | 35.02 |
| California | 13.03 | 12.08 | 0.65 | 6.28 | 0.29 | 61.02 | 87.25 | 56.90 | 16.85 |

Table 12.-Statistics of public high schools in cities of 8,000 population and over.


TABLE 13.-Statistics of public high schools outside of cities of 8,000 population and over.

| State or Territory. | Schools. | Secondary instructors. |  |  | Secondary pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Total. | Male. | Female. | Total. |
| United States | 5,814 | 7,017 | 5,481 | 12,498 | 1:2,314 | 163,798 | 284, 112 |
| North Atlantic Division | 1,180 | 1,36:3 | 1,749 | 3,111 | 27,553 | 37,938 | 65̆, 491 |
| South Atiantic Division . | 390 | 474 | 251 | 725 | 6,023 | 8,113 | 14, 136 |
| South Central Division | 594 | 788 | 469 | 1,257 | 11,668 | 15, 109 | 26, 777 |
| North Central Iivision | 2,917 | 4,007 | 2,742 | 6,749 | 69, 454 | 94, 476 | 163,930 |
| Western Division -...... |  |  | 270 | 656 | 5,616 | 8,16\% | 13,7\%8 |
| North Atlantic Division: |  |  |  |  |  |  |  |
| Maine | 146 | 151 | 123 | 273 | 2,967 | 3,809 1,059 | 6,776 |
| Vermont.-....- | 5 | 52 | 77 | 129 | 1,217 | 1,60\% | 2,824 |
| Massachusetts | 166 | $1 \% 1$ | 315 | 486 | 4, 687 | 5,697 | 9, 784 |
| Rhode Island. | 8 | 10 | 13 | 23 | 163 | 1261 | 424 |
| Connecticut | 51 | 53 | $7{ }^{\text {\% }}$ | 123 | 1,054 | 1,479 | 2,543 |
| New York. | 319 | 374 | 743 | 1,117 | 9,924 | 13,543 | 23, 47.2 |
| New Jersey | ${ }^{69}$ | 84 | 127 | 211 | 1,333 | 1,944 | 3,277 |
| Pennsylvania -- | 317 | 420 | 219 | 639 | 5,884 | 8,534 | 14,418 |
| South Atlantic Division: Delaware | 12 | 12 | 9 | 21 | 178 | 294 | $47 \%$ |
| Maryland | 40 | 52 | 23 | 75 | 743 | 993 | 1,736 |
| District of Columbia |  |  |  |  |  |  |  |
| Virginia---... | ${ }_{26}^{56}$ | 60 48 | 40 | 100 | 749 | 1,012 | 1,795 |
| West Virginia | 26 | 42 | 14 | 56 | 449 | 786 | 1,235 |
| North Carolina South Carolina | 17 98 | 18 115 | 12 | $\begin{array}{r}30 \\ 177 \\ \hline\end{array}$ | 1,3\%1 | 1,794 | 3.170 |
| Georgia -- | 112 | 135 | 67 | 202 | 1,841 | 2,261 | 4,102 |
| Florida. | 29 | 40 | 24 | 64 | $4 \% 9$ | 655 | 1,084 |
| South Central Division: |  |  |  |  |  |  |  |
| Kentucky- | 52 89 | -64 | 47 58 | 1115 | 1,032 | 1,343 1,798 | 2,375 3,360 |
| Alabama. | 54 | 76 | 70 | 146 | 1,180 | 1,645 | 2,825 |
| Mississippi | 97 | 107 | 80 | 187 | 1, 498 | 2,012 | 3,540 |
| Louisiana. | 26 | 35 | 28 | 63 | 474 | 658 | 1,132 |
| Texas... | 215 | 315 | 155 | 470 | 4,832 | 6,353 | 11,185 |
| Arkansas | 54 | 71 | 26 | 97 | 917 | 1,160 | 2,077 |
| Oklahoma | , | ${ }_{8}^{5}$ | ${ }_{3}$ | 8 | 50 | 76 | 126 |
| Indian Territory | 4 | 8 | 2 | 10 | 123 | 31 | 157 |
| North Central Division: |  |  |  |  |  |  |  |
| Indiana. | 350 | 587 | 219 | , 805 | 7,301 | 9,447 | 16, 448 |
| Illinois | 297 | 438 | 347 | 785 | 7,923 | 10, 560 | 18,483 |
| Michigan | 264 | 340 | 366 | 705 | 7,410 | 10,047 | 17,457 |
| Wisconsin | 206 | 280 | 265 | 545 | 5,797 | 7,907 | 13, 704 |
| Minnesot | 102 | 127 | 189 | 316 | 2,665 | 3,796 | 6, 461 |
| Iowa -. | 322 | 405 | 429 | 834 | 9,214 | 13,044 | 22, 258 |
| Missouri | 220 | 321 | 171 | 492 | 5,314 |  | 12,610 |
| North Dakota | 26 | 29 | 29 | 58 | 373 | 602 | 975 |
| South Dakota. | 60 | 68 | 42 | 110 | 1,003 | 1,351 | 2,354 |
| Nebraska | 247 | 295 | 175 | 470 | 4,948 | 7,533 | 12, 481 |
| Kansas--.-...- | 192 | 273 | 159 | 43.2 | 4,651 | 6,849 | 11,500 |
| Western Division: Montana |  |  |  |  | 230 |  | 588 |
| W yoming -- | 6 | 6 | 5 | 11 | 86 | 133 | 219 |
| Colorado | 34 | 72 | 40 | 112 | 988 | 1,51: | 2,491 |
| New Mexico | 7 | 14 | 6 | 20 | 100 | 143 | 243 |
| Arizona . - | 2 | 5 | 3 | 8 | 57 | 115 | 172 |
| Utah | 3 | 5 | 1 | 6 | 45 | 60 | 105 |
| Nevada | 9 | 12 | 10 | 22 | 164 | $\stackrel{267}{270}$ | 431 |
| Idaho.- | 8 | 11 | 7 | 18 | 216 | 270 | 486 |
| Washington | 43 | 50 | 30 | 80 | 623 | 973 | 1,576 |
| Oregon-.-- | 15 | 20 | 15 | 35 | 362 | 48.2 | 844 |
| California | 91 | 173 | 138 | 311 | 2,751 | 3,859 | 6,6:0 |

Table 14.-Average number of teachers to a public high school, students to a teacher, and students to a school in cities and outside of cities of 8,000 population.

| State or Territory. |  | \% <br>  | Average teachers to a high school. |  | Average students to a teacher. |  | Average students to a high school. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| United States | 5, $73 \%$ | 268 | 11.4 | 2.4 | 29.9 | 22.7 | 310.3 | 53.5 |
| North Atlantic Division | 1,416 | 3 3 | 13.2 | 2.6 | 29.4 | 21.1 | 387.7 | 55.5 |
| South Atlantic Division | 391 | 59 | 7.9 | 1.9 | $2 \% .6$ | 19.5 | 218.3 | 36.2 |
| South Central Division | 603 | \% | 5.7 | 2.1 | 27.9 | 21.3 | 159.2 | 45.1 |
| North Central Division | 3, 089 | 71 | 11.9 | 2.3 | -31.0 | 24.3 | 369.5 | 55.2 |
| Western Division. | 238 | 32 | 12.7 | 2.8 | 31.0 | 21.0 | 393.8 | 59.1 |
| North Atlantic Division: <br> Maine | 146 | 8 | 8.8 | 1.9 | 28.2 | 24.8 | 46.6 | 46.4 |
| New Hampshire | 57 |  | 8.0 | 2.2 | 27.0 | 18.3 | 216.4 | 40.3 |
| Vermont . . | 5.$)$ |  | 7.3 | 2.5 | 27.9 | 21.9 | 204.7 | 54.3 |
| Massachusetts | 231 | 3 | 11.5 | 2.9 | 25.5 | 20.1 | 368.5 | 58.9 |
| Rhode Island. | 2) |  | 11.7 | 2.9 | 21.6 | 18.4 | 2 z 2 | 53.0 |
| Comnecticut | 72 | 2 | 11.4 | 2.3 | 24.5 | 20.3 | 278.2 | 47.1 |
| New York | 362 | 16 | 18.5 | 3.5 | 35.6 | 21.0 | 659.2 | T3.6 |
| New Jersey | 9.5 | 1 | 11.7 | 3.1 | 25.2 | 15.5 | 295.7 | 47.5 |
| Pennsylvania | 375 | 2 | 9.7 | 2.0 | 30.9 |  | 299.5 | 45.5 |
| South Atiantic Division: Delaware | 13 |  | 20.0 | 1.8 |  | 22.5 | 580.0 |  |
| Maryland | 42 | 9 | '7.6 | 1.9 | 26.4 | 23.1 | 201.8 | 43.4 |
| District of Columbia | 5 |  | 27.4 | 0.0 | 2.0 | 0.0 | 680.2 | 0.0 |
| Virginia. | 64 | 6 | 5.9 | 1.8 | 30.5 | 18.0 | 181.1 | 32.1 |
| West Virginia | 32 |  | 4.0 | 2.2 | 30.0 | 23.1 | 120.0 | 47.5 |
| North Carolina | 20 | 1 | 3.0 | 1.8 | 33.4 | 18.1 | 100.3 | 31.9 |
| South Carolina | $8 \%$ | 17 | 5.5 | 1.8 | 25.1 | 17.9 | 138.0 | 32.3 |
| Georgia | 96 | 21 | 7.1 | 1.8 | 30.6 | 20.3 | 217.9 | 34.6 |
| Florida | 32 | 1 | 4.0 | 2.2 | 26.2 | 16.9 | 101.8 | 37.4 |
| South Central Division: |  |  |  |  |  |  |  |  |
| Kentucky | 64 | 6 | 6.7 | 2.1 | 26.0 | 21.4 | 174.6 | 4.5 .7 |
| Tennessee | 89 | 1: | 4.9 | 1.9 | 34.9 | 20.4 | 171.8 | 37.8 |
| Alabama | 48 | 14 | 4.9 | 2.7 | 25.4 | 19.3 | 124.0 | 52.3 |
| Mississippi | 79 | $\because 1$ | 5.3 | 1.9 | 32.0 | 18.9 | 170.7 | 35.5 |
| Louisiana | 29 | $\stackrel{\sim}{2}$ | 10.6 | 2.4 | 20.4 | 18.0 | 216.6 | 43.5 |
| Texas | 299 | 11 | 5.3 | 2.2 | 28.4 | 23.8 | 149.8 | 52.0 |
| Arkansas | 58 | 3 | 4.6 | 1.8 | 35.8 | 21.4 | 163.9 | 38.5 |
| Oklahoma | 6 |  | 3.3 | 2.7 | 21.0 | 15.8 | 70.0 | 42.0 |
| Indian Territory | 1 | 3 | 0.0 | 2.5 | 0.0 | 15.7 | 0.0 | 39.3 |
| North Central Division: |  |  |  |  |  |  |  |  |
| Ohio ... | 661 | 17 | 11.1 | 1.9 | 32.2 | 24.2 | 357.7 | 45.8 |
| Indiana. | 359 | 23 | 9.4 | 2.3 | 32.0 | 20.8 | 302.1 | 47.9 |
| Illinois . | 333 | 11 | 13.5 | 2.6 | 30.0 | \%3. 5 | 403.5 | 62.2 |
| Michigan | 287 | 7 | 12.7 | 2.7 | 29.8 | 24.7 | 378.5 | 66.1 |
| W isconsin | 231 |  | 9.8 | 2.6 | 28.3 | 25.1 | $2 \% 6.9$ | 66.5 |
| Minnesota | 115 |  | 15.0 | 3.1 | 30.0 | $\cdots 2$ | 449.9 | 63.3 |
| Iowa. | 336 | 8 | 10.3 | 2.6 | 29.8 | 26.7 | 307.5 | 69.1 |
| Missouri | 233 | 1 | 18.1 | 2.2 | 31.6 | 25.6 | $5 \% 1.1$ | $5 \% .3$ |
| North Dakota | 27 |  | 7.0 | 2.2 | 2\%. 1 | 16.8 | 155.0 | 37.5 |
| South Dakota | 61 |  | 9.0 | 1.8 | 29.2 | 21.4 | 263.0 | 39.2 |
| Nebraska | 250 |  | 25.3 | 1.9 | 3.5 .9 | 26.6 | 909.0 | 50.5 |
| Kansas | 196 | 7 | 7.8 | 2.3 | 39.7 | 20.6 | 310.3 | 59.9 |
| Western Division: |  |  |  |  |  |  |  |  |
| Montana | 17 | 2 | 8.8 | 2.2 | 29.9 | 1\%.8 | 261.8 | 39.2 |
| Wyoming | 7 |  | 6.0 | 1.8 | 23.0 | 19.9 | 138.0 | 36.5 |
| Colorado | 42 | 2 | 11.9 | 3.3 | 28.7 | 20.3 | $3 \pm 1.6$ | 73.4 |
| New Mexico | 7 |  | 0.0 | 2.9 | 0.0 | 12.2 | 0.0 | 34.7 |
| Arizona | 2 |  | 0.0 | 4.0 | 0.0 | 21.5 | 0.0 | 86.0 |
| Utah | 5 |  | 16.5 | 2.0 | 30.6 | 17.5 | 505.0 | 35.0 |
| Nevada | 8 | 1 | 0.0 | 2.4 | 0.0 | 19.6 | 0.0 | 47.9 |
| Idaho. | 8 |  | 0.0 | 2.3 | 0.0 | 27.0 | 0.0 | 60.8 |
| Washington | 47 |  | 14.3 | 1.9 | 33.1 | 19.7 | 471.8 | 36.7 |
| Oregon | 17 |  | 12.5 | 2.3 | 42.9 | $\% 4.1$ | 536.0 | 56.3 |
| California | 78 | 27 | 13.9 | 3.4 | 30.8 | 21.3 | 408.6 | \% 2.7 |

TABLE 15．－Public high schools－Equipment，income，benefactions，and endowments．

| State or Territory． | Libraries． |  | Grounds，build－ ings，scientific apparatus，etc． |  | State and municipal aid． |  | Tuition fees． |  | Productive funds． |  | Income from other ${ }^{r}$ sources and unclassified． |  | Total income from all sources． |  | Benefac－ tions． |  | Total money value of en－ dowment． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \dot{\oplus} \\ & \stackrel{\oplus}{G} \\ & \stackrel{\rightharpoonup}{0} \\ & \stackrel{\circ}{8} \end{aligned}$ |  | － |  |  |  | $\begin{aligned} & \text { + } \\ & \text { ह̈ } \\ & \text { है } \\ & 4 \end{aligned}$ |  | $\begin{aligned} & \text { 蔦 } \\ & \text { だ } \\ & \text { 品 } \end{aligned}$ | $\begin{gathered} 0 \\ 0 \\ 0 \\ 0 \\ 0.0 \\ 0.0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{gathered}$ |  |  | $\begin{aligned} & \text { +3 } \\ & \text { By } \\ & \text { 品 } \end{aligned}$ | $\left\lvert\, \begin{array}{cc} 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ 0 & E \\ 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ 0 & 0 \end{array}\right.$ | $\begin{aligned} & \text { 兌 } \\ & \text { ag } \\ & \text { 品 } \end{aligned}$ |  |  |
| United Sta | 4， 899 | 2， 727,003 | 4， 742 | 596，131，695 | 2，067 | \＄5，545，246 | 1，688 | \＄537，576 | 174 | \＄140，879 | \％82 | \＄31，33\％， 420 | 2，230 | 87，661，121 | 69 | \＄39，003 | 73 | \＄1，182， 527 |
| North Atlantic Division | 1，201 | 943， 746 | 1，051 | 33， 89 | 564 | 2，044， | 42. | 165， 891 | 63 | 41，371 | 28 | 479， | 08 | 2，730，620 | 29 | 23，531 | 45 | 868， 140 |
| South Atlantic Division． | 221 | 93，378 | 343 | 3，389，885 | 211 | 336， 942 | 146 | 57，083 | 10 | 6，986 | 64 | 33， 747 | 228 | 434， 758 | 5 | 3，920 | 4 | 83，325 |
| South Central Division． | 385 | 152，479 | 577 | 6，317，234 | 346 | 565， 784 | 297 | 111，974 | 24 | 15， 754 | 100 | 58，689 | 365 | 753，211 | 4 | 208 | 8 | 89，4\％8 |
| North Central Division | ， 839 | 1，408， 882 | 2，581 | $46,153,130$ | 841 | 1，987， 618 | 756 | 177，945 | 78 | 76，768 | 357 | 618，280 | 949 | 2，860．605 | 24 | 6,649 | 12 | 36，934 |
| Western Division． | 253 | 128，578 | 190 | 6，376，374 | 105 | 609，55\％ | 67 | 24，683 |  |  | 33 | 147， 686 | 130 | 781，926 | 7 | 4，695 | 4 | 4， 650 |
| North Atlantic Division： Maine | 91 | 18，90\％ | 109 | 906，700 | 117 | 102，439 | 60 | 5，450 | 12 | 2，412 | 53 | 33，24\％ | 121 | 143，548 |  |  | 5 | 6，507 |
| New Hampshire | 39 | 11， 801 | 39 | 1，023， 250 | 17 | 33，234 | 17 | 3，897 | 5 | 2，426 | 7 | 8，519 | 20 | 48，076 | 1 | 1，000 | 4 | 57，095 |
| Vermont | 45 | 15， 854 | 34 | 589，880 | 14 | 18，367 | 15 | 6，586 | $\stackrel{2}{2}$ |  | 9 | 22， 678 | 19 | 47，729 |  |  | 1 | 30,000 |
| Massachusett | 198 | 113， 701 | 169 | 10，618，254 | 73 | 372， 251 | 44 | 21，771 | 17 | 15，600 | 31 | 146，589 | 94 | 556，161 | 8 | 1，787 | 19 | 399,660 |
| Rhode Island | 14 | 11，230 | 8 | 229，000 | 5 | 10，540 | 5 | 1，954 | 1 | 4，000 | 1 | ${ }^{990}$ | 6 | 17，484 |  |  | 1 | 90， 000 |
| Connecticut | ${ }^{67}$ | 50，610 | 49 | 1，994，001 | ${ }^{26}$ | 98，601 | 12 | 3，164 | 4 | 3，204 | 5 | 10，268 | 30 | 115，237 | 4 | 1，275 | 6 | 84， 106 |
| New York． | 359 | 492， 967 | 335 | 9，605，047 | 186 | 881， 397 | 181 | 76， 794 | 17 | 12，（159 | 98 | 230， 111 | 188 | 1，20x， 358 | 7 | $15 \%$ | 9 | 200,772 |
| New Jersey | 87 | 59，850 | ${ }^{67}$ | 2，290， 606 | 16 | 169，052 | 10 | 27，340 | $\frac{1}{3}$ | 15 | ${ }^{4}$ | 4， 800 | 18 | 201， 207 | 3 | 115 |  |  |
| Pennsylvania－－．．．－． | 301 | 168， $82 \%$ | 241 | 6，637，934 | 110 | 355， 469 | \％ | 18，935 | 3 | 1，560 | 20 | 16，856 | 11.2 | 392， 820 | 3 | 3，128 |  |  |
| Delaware． <br> South Atlantic Division： | 7 | 1，430 | 13 | 259，600 | 4 |  |  |  | 1 | 1，300 |  |  |  |  |  |  |  |  |
| Maryland | 37 | 18，311 | $\stackrel{29}{ }$ | 588， 300 | 13 | 89， 790 | 6 | 2，202 |  |  | 4 | 1，779 | 14 | 93，871 | 1 | 80 |  |  |
| District of | 5 | 11，300 | 2 | 289， 150 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Virginia－－ | 27 | 8，748 | 49 | 481， 600 | 21 | 45，021 | 15 | 6，498 | 4 | 795 | 10 | 5，885 | 28 | 58，199 |  |  | 1 | 5，000 |
| West Virginia | 26 9 | 10,091 8,930 | 24 | 431,880 107,100 | 9 7 | 11,567 14,050 | ${ }_{5}^{6}$ | 773 1,048 | 1 | 250 | ${ }_{3}^{2}$ | 1，230 | 8 | 13,670 16,048 | 1 | 300 | 1 |  |
| Nouth Carolina | 41 | 11，05．2 | 85 | 388，595 | 63 | ${ }_{75} 14,166$ | 45 | 9，574 | 2 | 641 | 22 | 8，005 | ${ }_{68}^{8}$ | 10，048 | 1 | 300 | 1 | 24，2 |
| Georgia ．．．．． | 54 | 19，576 | 100 | 669， 760 | 78 | 64，903 | 64 | 35， 452 | 1 | 1，000 | 14 | 5，618 | 78 | 106，973 | 3 | 3,540 | 2 | 54，075 |
| Florida－－．．．－．－．－－－ | 15 | 3，910 | 26 | 176， 900 | 17 | 31，192 | 3 | 1，086 | 1 | 3，000 | 7 | 8，380 | 19 | 43，658 |  |  |  |  |
| South Central Division： Kentucky | 45 | 21，302 | 59 | 1，092，122 | 27 | 53，953 | 汭 | 10，232 | 4 | 4． 884 | 7 | 879 | 38 | 69， 848 |  |  |  |  |
| Teunessee | 48 | 12， 789 | 85 | －733， 200 | 45 | 64.999 | 40 | 12，8 | 4 | 1，910 | 14 | 7，208 | 49 | 86，974 |  |  | \％ | 14，700 |
| Alabama | 24 | 17， $90 \%$ | 49 | 483，45） | 40 | 58，108 | 33 | 18，23\％ | 3 | 440 | 11 | 11， 223 | 41 | 88，108 |  |  | 1 | 1，520 |
| Mississipp | 50 | 18.138 | 81 | 517，205 | 61 | 78， 556 | 50 | 21，593 | 4 | 715 | 22 | 6,345 | 65 | 107，6：29 | 1 | 15 | 2 | 2，200 |
| Louisiana | 24 | 15，267 | 212 | 233，600 | 9 | 26， 134 | 5 | 2，970 | 1 | 200 | 6 | 3，645 | 12 | 32， 949 |  |  |  |  |
| Texas | 182 32 | 48，578 | ${ }^{214} 5$ | 2，476，792 | 137 | 241， 814 | 124 | 37， 149 | ${ }_{1}^{7}$ |  | 30 | 23， 719 | 139 20 | 308，967 | 2 | 105 88 | 1 | 60，000 |

TABLE 15．－Public 7igh schools－Equinment，income，bencfactions，and endowments－Continued．

| State or Territory． | Libraries． |  | Grounds，build－ ings，scientific apparatus，etc． |  | State and municipal aid． |  | Tuition fees． |  | Productive funds． |  | Income from other sources and mnclassified． |  | Total income irom all sources． |  | Benefac－ tions． |  | Total money value of en－ dowinent． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \stackrel{+}{\sharp} \\ & \text { B } \\ & \text { B } \end{aligned}$ |  | $\begin{aligned} & +\dot{B} \\ & \text { B } \\ & \text { 星 } \end{aligned}$ |  |  |  |  |  |  |  | $\begin{aligned} & \text { 范 } \\ & \text { O} \\ & \text { 药 } \end{aligned}$ |  |  |
| South Central Division－ Continued． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oklahoma－－．．．．．．．．．． | ${ }^{6}$ | 1，958 | 5 | \＄168，000 | 2 | 83，600 | 2 | \＄455 |  |  |  |  | $\stackrel{2}{2}$ | 84，055 |  |  |  |  |
| Indian Territory ．．．．－－ | 1 | 1，000 |  | 178，390 | 1 | 10，000 |  |  |  |  | 1 | 8190 | ， | 10，490 |  |  |  |  |
| Ohio | 545 | 214， 184 | 552 | 7，949，550 | $1 \%$ | 468， $45 \%$ | 153 | 34，883 | 21 | ¢21，081 | 78 | 81，348 | 209 | （05\％，\％69 | 2 | 695 | 1 | S12，000 |
| Indiana | 338 | 145， 669 | 289 | 4，302， 358 | 100 | 293，589 | 78 | 30，095 | 5 | 6，214 | 30 | 27， 898 | 113 | 357， 796 | 5 | 420 | 1 |  |
| Illinois | $3 \times 8$ | 161，712 | 270 | 6，102，502 | 90 | 428， 926 | 88 | 22，490 | 7 | 3.116 | 29 | 72， 816 | 162 | 5：7，348 | 6 | 3，383 | 4 | 27， 884 |
| Michigan | 271 | 217，057 | 241 | 5，394，136 | 86 | 197，53\％ | 94 | 20， 151 | 16 | 16，835 | 53 | 112， $6: 21$ | 103 | 347， 142 | 2 | 115 | 1 | 2，000 |
| Wisconsin | 217 | 148，18： | 159 | 3，701，487 | 108 | 135， 483 | 98 | 23，313 | 3 | 1，475 | 47 | 109，546 | 109 | 269，820 | 3 | 1，540 | 1 | 3，500 |
| Minnesot | 111 | 109，986 | 103 | 3，464， 867 | 3． | 6ik， 611 | 11 | 1，631 | 3 | 3，000 | 11 | 21，46\％ | 35 | 90， 004 |  |  | 1 | 40，000 |
| ［owa．． | 316 | 130，612 | 284 | 4．96\％， 1135 | 58 | 95，59：3 | 63 | 14，253 | ${ }_{\sim}^{6}$ | 6，485 | 19 | 41， 676 | 68 | 157，943 | 3 | 174 |  |  |
| Missouri | 216 | 104， 139 | $: 310$ | 4，098， 7819 | 59 | 80， 675 | 56 | 11，295 | 7 | 7，745 | $\because 8$ | 57，128 | 66 | 156，843 | 2 | 250 | 1 | 16，000 |
| North Dakota | 25 | 11，936 | 23 | 336，000 | 4 | 5，e¢0 | ： | 400 |  |  |  |  | 4 | 5， 900 |  |  |  |  |
| South Dakota | 55 | 15， 5.59 | 50 | 5655100 | 9 | 13，653 | 9 | 960 |  |  | 5 | 7，909 | 12 | 20，46： |  |  |  |  |
| Nebraska | 230 | 66.069 | 202 | 2，667，645 | 59 | 81，110 | $4!$ | 6，769 | 7 | 7，867 | 24 | 32， 571 | 65 | 128，317 | 1 | 17\％ |  |  |
| Kansas－－．．．．． | 187 | 83， 787 | 168 | 2．608，60 | 61 | 120,542 | 55 | 11，765 | 3 | 2,950 | 28 | 53，305 | 63 | 190， 562 |  |  | 1 | 35，000 |
| Western Division： Montana | 19 | 9，344 | 15 | 385， 100 | 5 | 29， 6 \％ | 3 | 54.4 |  |  | 1 | 1，000 | 6 | 31，199 |  |  |  |  |
| Wyoming | 7 | 4，452 | 5 | 110，069 | 4 | 8，115 | 2 | 140 |  |  |  |  | 4 | 8，255 |  |  |  |  |
| Colorado | 40 | 31，851 | 34 | 2，584，300 | 8 | 96，\％ 2 | 2 | 1，050 |  |  | 5 | 35，20 | 12 | 132， 976 | 1 | 3，000 | 1 | 4，000 |
| New Mexi | 5 | 1，330 | ， | 52， 5100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arizona | $\stackrel{3}{5}$ | 880 | $\ddot{4}$ | 70， 100 |  |  |  |  |  |  | ， | 8，000 | 1 | 8．000 |  |  |  |  |
| Utah | 5 | 1，525 | ${ }_{6}^{4}$ |  | $\stackrel{2}{2}$ | 6,500 4,609 | 1 | 200 |  |  |  | 25,990 800 | $\because$ | 33,600 4,800 | 1 | 550 | 1 | 550 |
| Idaho． | ${ }_{6}$ | 4，000 | 5 | 97， 660 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington | 41 | 12，261 | 29 | 643， 7 \％ | 10 | 33，210 | 1 | 7 |  |  | 1 | 1，800 | 10 | 35， 085 |  |  |  |  |
| Oregon． | 17 | \％，247 | 13 | 39，550 | \％ | 19， 885 | 3 | 48.5 |  |  | 1 | 3，000 | 4 | 23，2\％0 |  |  |  |  |
| California | 10： | 52， 569 | 73 | 2，097，000 | $\%$ | 410，998 | 50 | 22,159 |  |  | 21 | 72，584 | 87 | 505， 741 | 5 | 1，145 | 2 | 100 |

TAble 16．－Private high schools and academies－Number of schools，secondary instructors，secondary students，and elementary pupils in 1899－1900．

| State or Territory． |  | Secondary in－ structors． |  |  | Secondary stu－ dents． |  |  | Colored secondary students（in－ cluded in preceding column）． |  |  | Elementary pu－pils，including all below sec－ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 急 |  | $\begin{aligned} & \text { ت゙ } \\ & \text { ث゙ } \\ & \text { E. } \end{aligned}$ |  |  | Tin है | 帚 | 感 | $\begin{aligned} & \text { تूं } \\ & \text { Ĥ } \end{aligned}$ | $\begin{gathered} \text { ® } \\ \text { ت゙ } \end{gathered}$ |  | $\begin{gathered} \text { ت゙゙̈ } \\ \text { H } \\ \hline \end{gathered}$ |
| Unit | 1，978 | 1，2 | 842 | 10， 117 | 55， 734 | 55，003 | 110， 797 | 990 | 1，100 | 2，390 | 8， 227 | 68，65\％ | 126， 886 |
| N．Atlantic Divisi | 66 | 1，824 | 489 | 4，3 | 1, | 19，343 | 40，776 | 85 | 26 |  |  | 30 | 3．2，901 |
| S．Atlantic Divisio | 400 | 750 | 881 | 1，634 | 10，171 | 10，0：31 | 20，202 | 503 | 891 | 1，39 | 11， 83 | 14， 654 | 20，486 |
| S．Central Division | 417 | $6: 7$ | 758 | 1，385 | 11，298 | 10，743 | 22,041 | 380 | 351 |  | 15， 599 | 16.502 | 3． 101 |
| N．Central Divisio | 354 | 824 | 1，209 | 2，113 | 10， 015 | 11，559 | 21，5\％4 | 22 | 32 |  | 8，616 | 13，494 | $2: 2,140$ |
| Western Division | 128 | 250 | 42. | $65 \%$ | 2，817 | 3，387 | 6，204 | 0 | 0 | 0 | 5，188 | 8，0\％0 | 13，208 |
| N．Atlantic Division： <br> Maine | 33 | 43 | 85 | 128 | 1，042 | 1，317 | 2，389 |  |  |  | 99 | 123 |  |
| New Hamp | 33 | 111 | 61 | 172 | 1，642 | ，958 | 2，600 | 3 |  |  | 1，364 | 316 | 1，600 |
| Vermont | 13 | 23 | 44 | 70 | 495 | 539 | 1，035 | 0 |  |  | 443 | T1， | 920 |
| Massachuset | 97 | 237 | 427 | 684 | 3，034 | 2， 877 | 5.911 | 17 |  | 2 | 682 | 850 | 1，56\％ |
| Rhode Island | 14 | 39 | 47 | 79 | 365 | \％ 269 | 634 | 0 |  | 0 | 431 | 86. | 1，293 |
| Connecticu | 63 | 136 | 211 | 347 | 1，410 | 1，399 | 2， 809 | 3 |  |  | 541 | 999 | 1，540 |
| New York | 204 | $59 \%$ | $8 i 8$ | 1，494 | 5，250 | 5，853 | 11， 100 |  |  |  | 6，875 | 6，724 | 1．3， 299 |
| New Jersey | 711 | 198 | 268 | 466 | 2．109 | 1，\％8 | 3， 698 | 0 | 0 | 0 | 1，523 | 1，691 | 3，217 |
| Pennsylvania | 131 | 430 | 418 | 873 | 6，085 | 4，310 | 10，395 | 58 | 114 | 172 | 5，004 | 3，859 | 8，863 |
| S．Atlantic Division： <br> Delamare |  | 13 | 14 |  |  |  |  | 0 |  |  |  | 62 | 33 |
| Maryland | 46 | 140 | 160 | 303 | 1，038 | 1，2\％6 | 2，314 | 0 | 0 | 0 | 797 | \％11 | 1，508 |
| Dist．of Col | 21 | 40 | 105 | 146 | 25\％ | 515 | 807 |  |  |  | 353 | 890 | 1，213 |
| Virginia | 82 | $1 \% 1$ | 167 | 338 | 1，919 | 1，653 | 3，60\％ | 121 | 18. | 308 | 1，583 | 1， 859 | 3，396 |
| West Virgin | 13 | 5 | 36 | 61 | 455 | 510 | 9 ¢ |  |  |  | 261 | 320 | 581 |
| North Carolina | 122 | 201 | $1{ }_{6} 1$ | 372 | 3，680 | 2， 797 | 6， 487 | 128 | 194 | $3{ }^{3}$ | 4，084 | 4，039 | 8,128 |
| South Caroli | 36 | 63 | 64 | 130 | 935 | 804 | 1，739 | 23 | 26 | 49 | 945 | 1，213 | 2， 158 |
| Georgia | $6 \%$ | 89 | 136 | $22^{2}$ | 1，621 | 2， 116 | 3，${ }^{7} 34$ | 171 | 424 | 595 | 2， 985 | 4，344 | 7，333 |
| Florida | 9 | 5 | 30 | 35 | $6{ }^{1}$ | 184 | 248 | 60 | $6{ }^{6}$ | 120 | 795 | 1，216 | 2,011 |
| S．Central Division： Kentucky | 95 | 133 | 197 | 330 | 2，025 | 2，030 | 4，085 | 60 | 0.5 | 85 |  | 3，062 |  |
| Tennessee | 99 | 165 | 146 | 311 | 2，973 | 2，6\％6 | 5，619 | 15 | 9 | 3 | 4， 137 | 4，004 | 8，037 |
| Alabama | 59 | 73 | 81 | 154 | 1，229 | 1，136 | 2，365 | 69 | 50 | 119 | 1，6：9 | 2，045 | 3，651 |
| Mississipu | 43 | 54 | 78 | 132 | 988 | 989 | 1，97\％ | 67 | 93 | 166 | 1，647 | 1，791 | 3.438 |
| Louisiana | 30 | 33 | 79 | $11 \%$ | 645 | 635 | 1，282 | 12 | 21 | 33 | 1，296 | 1，058 | 2，351 |
| Texas | 62 | 110 | 136 | 245 | 2， 494 | 2.415 | 4，909 | 128 | 110 | 238 | $: 2,6: 8$ | 3，160 | 5，808 |
| Arkansas | 21 | 45 | 23 | 68 | 751 | $62 \%$ | 1，373 | 29 | 37 | 66 | \％86 | 730 | 1，516 |
| Oklahoma | 11 | 0 | 15 | 3 | 0 | 20 | 20 | 0 | 0 |  |  | 20 |  |
| Indian Territory | 11 | 14 | 15 | 20 | 192 | 189 | 381 | 0 | 0 | 0 | \％ 71 | 676 | 1， 450 |
| N．Central Division： | 49 | 92 | 201 | 293 | 1，107 | 1．52\％ | ， 6 |  |  |  |  |  |  |
| Indiana | $2 \%$ | 86 | 1：21 | 207 | 1， 660 | 1，153 | 2，213 | 0 | 0 |  | 793 | 1，355 | 2， 175 |
| Illinois | 64 | 122 | 256 | 378 | 1，450 | 2，075 | 3，5：5 | （） | 0 |  | 1．103 | 2，5¢u | 3， 59 |
| Michigan | 20 | 39 | 91 | 133 | 395 | \％ 79 | 1，175 | 0 | 0 |  | 911 | 1，344 | 2，255 |
| Wisconsin | 23 | 80 | 94 | 174 | 810 | 622 | 1，462 | 1 | 0 |  | 544 | 430 | 1， 112 |
| Minnesot | 29 | 82 | 95 | $17 \%$ | 902 | 925 | 1，84 | 0 | 0 | 0 | 1，634 | 1．481 | 3，118 |
| Iowa | 35 | 64 | 99 | 163 | 1，013 | 1，185 | 2，198 | 1 | 1 | 2 | 1，232 | 1，488 | $2,7 \% 0$ |
| Missouri | 75 | 178 | 214 | 392 | 2，277 | 2，231 | 4，508 | 20 | 30 | 50 | 832 | 2，120 | 2． 939 |
| North Dakota |  | ${ }^{3}$ | ${ }^{4}$ | S | 70 | 33 | 103 | 0 | 0 | 0 | 96 | 150 | 216 |
| South Dakota | ${ }^{7}$ | 11 | 24 | 38 | 135 | 172 | 304 | 0 | 0 |  | 127 | 20 | 335 |
| Nebraska <br> Kancas | 19 | $\stackrel{29}{38}$ | 53 | 85 | 279 | 405 | 684 918 | 1 | 1 |  | 412 | ${ }_{31}$ | 1，${ }_{618}$ |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana | 3 | 0 | 7 | 7 | 0 | 66 | 66 | 0 | 0 | 0 | 10 | 591 | \％0 |
| Colorado | 6 | 9 | 31 | 40 | 6 | 121 | 197 | 0 | 0 |  | 447 | 43； | 879 |
| Nery Mex | 4 | 5 | 10 | 15 | 44 | 59 | 103 | 0 | 0 | 0 | 111 | 141 | 23\％ |
| A lizona | $\stackrel{2}{2}$ | 1 | 20 | ， | 10 | 33 | 43 | 0 | 0 | 0 | 35 | 109 | 144 |
| Utah | 13 | 32 | 42 | 74 | 860 | 756 | 1，616 | 0 | 0 | 0 | 58\％ | 576 | 1，158 |
| Idaho |  |  | 9 | 17 |  |  |  |  |  |  |  | 19 |  |
| Washington | 13 | 23 | 51 | 74 | 150 | 376 | 596 | 0 | 0 | 0 | 255 | 698 |  |
| Oregon | 19 | 32 | 50 | $8: 2$ | 367 | 429 | 796 | 0 | 0 |  | 796 | 1，0：0 | 1，836 |
| California | 63 | 140 | 220 | 360 | 1，22：2 | 1，458 | 2，680 | 0 | 0 |  | 2， 724 | 4， 861 | 7，08\％ |

Table 17.-Private high schools and academies-Number of secondary students in college preparatory course; number of graduates and college preparatory students in graduating class in 1899-1900.

| State or Territory. | Secondary students preparing for college. |  |  |  |  |  | Graduates in the class of 1900. |  |  | College preparatory students in graduating class of 1900 . |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Classícal course. |  |  | Scientificcourse. |  |  |  |  |  |  |  |  |  |
|  |  |  | \# |  |  |  |  |  | $\begin{aligned} & \text { Wi } \\ & \text { ※ } \\ & \text { E } \end{aligned}$ | 䔍 |  |  |  |
| United States | 12, 780 | 8,346 | 21,126 | 9,224 | 4,965 | 14, 189 | 6, 2265 | 5, 990 | 12, 216 | 3, 825 | 1,848 | 5, 678 | 8,900 |
| North Atlantic Division | 5,964 | 2, 597 | 8,561 | $1,2 \% 0$ | , 313 | 5, 233 | 3, 308 | 2, 747 | 6, 050 | 2, 274 | 754 | 3, 023 | 3,707 |
| South Atlantic Division. | 2,2961 | 1,979 | 4,275 | 1,046 | \%64 | 1,810 | 725 | 839 | 1,55\% | 454 | 265 |  | 1,581 |
| South Central Division | 2,2181 | 1,74 | 3, 992 | 1,568 | 1,205 | 2,773 | 718 | 716 | 1,434 | 362 | 283 |  | 1,261 |
| North Central Division | 1,7941 | 1, 506 | 3,300 | 1, \%45 | 1,256 | 3,001 | 1,218 | 1,363 | 2,581 | 565 | 438 | 995 | 1,936 |
| Western Division ..... | 508 | 490 | 998 | 645 | 427 | 1,072 | $20: 2$ | 332 | 594 | 168 | 118 | 286 | 405 |
| North Atlantic Division: Maine $\qquad$ | 265 | 180 | 425 | 87 | 59 | 146 | 150 | 181 | 331 | 74 | 40 | 114 |  |
| New Hampshi | 395 | 54 | 449 | 218 | 23 | 241 | 259 | 114 | 373 | 193 | 37 | 239 | 40 |
| Vermont. | 90 | 19 | 108 | 47 | 40 | 87 | 83 | 98 | 181 | 39 | 27 | 66 | 115 |
| Massachusett | 1, $42 \%$ | 391 | 1,818 | 543 | 243 | 786 | 431 | 512 | 943 | 333 | 205 | 538 | 7 |
| Ruode Island | 130 | 60 | 190 | 16 | 17 | 33 | 51 | 42 | 93 | 36 | 17 | 53 | 35 |
| Connecticat | 402 | $20 \%$ | 604 | 373 | 55 | 428 | 201 | 227 | 488 | 177 | 40 | $21 \%$ | 46 |
| New York | 1,482 | 6.4 | 2,156 | 1,233 | 236 | 1,469 | 85: | 751 | 1,603 | 551 | 161 | 712 | 2,124 |
| New Jersey | 780 | $45 \%$ | 1, $23 \hat{i}$ | 484 | 146 | 630 | 401 | 261 | 662 | 341 | 94 | 435 | 486 |
| Pennsylvania. | 393 | 580 | 1,573 | 1,219 | 434 | 1, 713 | 815 | 561 | 1,3\%6 | 530 | 133 | 663 | $78 \pm$ |
| South Atlantic Division: <br> Delaware | 22 | 7 | 29 | 27 | ¢9 | 56 | 28 | 16 | 44 | 14 | 4 | 18 | 44 |
| Maryland | 246 | 299 | 545 | 213 | 180 | 393 | 127 | 160 | 287 | 90 | 66 | 156 | 159 |
| District of Columbi | 31 | 115 | 149 | 33 | 4 | 37 | 18 | 63 | 81 | 12 | 10 | 22 |  |
| Virginia | 431 | :24 | 649 | 168 | 158 | 324 | 89 | 148 | 237 | 61 | 24 | 85 | 314 |
| West Virgini | 68 | 79 | 147 | \% | $\delta$ | 35 | 43 | 42 | 85 | 11 | 2 | 13 | 56 |
| North Carolina | 875 | 500 | 1,3\% | 34: | 193 | 533 | 275 | 135 | 410 | 180 | 56 | 236 | 442 |
| South Carolina | 199 | 186 | 385 | ${ }^{79}$ | 25 | 104 | 71 | 116 | 187 | 41 | 51 | 92 | 318 |
| Georgia | 401 | 516 | $91 \%$ | 159 | 167 | 326 | 70 | 146 | 216 | 41 | 49 | 90 | 248 |
| Florida | 20 | 29 | 49 |  |  |  | 4 | 6 | 10 | 4 | 3 |  | 0 |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 419 | 355 | 805 | 256 | 159 | 415 | 153 | 138 | 291 | 69 | 52 | 121 | 308 |
| Tennessee | 804 | 438 | 1, 24.2 | 284 | 312 | 596 | 194 | 159 | 353 | 104 | 51 | 155 | 75 179 |
| Alabama | 171 | 198 | 369 | 302 | 105 | 407 | 56 | 67 | 123 | 38 | 46 | 84 | 179 |
| Mississippi | 153 | 94 | 247 | 154 | 132 | 286 | 73 | 69 | 142 | 39 | 29 | 68 | 86 |
| Louisiana. | 53 | 78 | 131 | 91 | 46 | $13 \%$ | 28 | 80 | 108 | 20 | 39 | 59 |  |
| Texas. | 458 | 509 | 96 | $36 \%$ | 358 | $7 \% 0$ | 176 | 169 | 345 | 80 | 53 | 133 | 385 |
| Arkansas | 118 | 84 | $20 \%$ | 99 | 62 | 161 | 31 | 24 | 55 | 12 | 10 | 22 | 178 |
| Oklahoma | 0 | 6 | 6 | 0 | 0 | 0 | $\stackrel{1}{6}$ | 0 | 0 | 0 | 0 | 0 | 0 |
| Indian Teriptory | 1 ? | 11 | 23 | 20 | 31 | 51 | \% | 10 | 17 | 0 | 3 | 3 |  |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio | 298 | 243 | 501 | 226 | 174 | 400 | 142 | $1 \%$ | 319 | 79 | 61 | 140 | 75 |
| Indiana | 211 | 176 | $38 \hat{1}$ | 219 | 135 | 354 | 103 | 101 | 209 | 28 | 16 | 41 | 297 |
| Illinois | $19 \%$ | 3:21 | 518 | 287 | 258 | 545 | 244 | 290 | 331 | 83 | 102 | 185 | 12\% |
| Michigan | 54 | $\% 1$ | 127 | 84 | $7 \%$ | 156 | 34 | 79 | 113 | 20 | 26 | 46 | 168 |
| Wisconsin | 234 | $9 \%$ | 331 | 109 | 46 | 155 | 105 | 119 | $2 \% 4$ | 5.5 | 31 | 86 | 218 |
| Minnesota | $18^{\circ}$ | 76 | 258 | 163 | 68 | 231 | 160 | 109 | 269 | 69 | 36 | 105 | *11 |
| Iowa | 16. | 109 | 277 | 138 | 117 | 255 | 125 | 155 | 280 | 61 | 60 | 121 | 26.2 |
| Missouri | 339 | 298 | 637 | $35 \%$ | 218 | 575 | 189 | 242 | 431 | 105 | 60 | 16.5 | $40 \%$ |
| North Dakota | 6 | $\stackrel{3}{0}$ |  |  |  |  | 1 | $\stackrel{2}{2}$ | 3 | 1 | 1 | 2 |  |
| South Dakota | 31 | 30 | 64 | 21 | 42 | 63 | 22 | 22 | 44 | 19 | 10 | 29 |  |
| Nebraska | 45 | 57 | $10 \%$ | 41 | 58 | 99 | 36 | $3{ }^{\circ}$ | 72 | 25 | 18 | 43 | 89 |
| Kansas .-.-.... | 64 | 26 | 90 | 100 | 68 | 168 | 52 | 31 | 83 | 22 | $\%$ | 29 | $8 \pi$ |
| Western Division: <br> Montana |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana <br> Wyoming... |  | 36 | 36 |  |  | 4 |  |  |  |  |  | 6 | ----- |
| Colorado | 20 | 5 | 25 | 13 | 6 | 19 | 7 | 14 | 21 | 3 | - | 5 | 18 |
| New Mexico | , | 0 | 1 |  |  |  | 6 | 2 | $\delta$ |  |  |  |  |
| Arizona. | 5 | 5 | 10 |  |  |  | 0 | 4 | 4 |  |  |  |  |
| Utah. | 200 | 150 | 350 | 15 j | 30 | 181 | 50 | 54 | 100 | 21 | 19 | 40 |  |
| Nevada |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho | 5 | 3 | 8 | 1 | 0 | 1 | 6 | 14 | 20 | 6 | 10 | 16 |  |
| Washington | 36 | 38 | 74 | 18 | 50 | 68 | 17 | 46 | 63 | 6 | 15 | 21 |  |
| Oregon ... | 61 | 49 | 110 | 85 | 134 | 219 | 38 | 31 | $7 \%$ | 13 | 9 | 22 | 30 |
| California | 175 | 204 | 379 | $37 \%$ | 203 | 580 | 138 | 159 | 89 2์ | 119 | 57 | $1 \% 6$ | 357 |

Tabliz 18．－Private high schools and academies－Number of secondary students pursuing certain studies in 1899－1900．

| State or Territory． | Latin． |  |  |  | Greek． |  |  |  | French． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { © } \\ & \text { ส్ } \\ & \text { む̈ } \\ & \text { E } \end{aligned}$ | $\begin{aligned} & \text { ت゙ं } \\ & \text { T } \\ & \text { E-1 } \end{aligned}$ |  | $\frac{\stackrel{3}{5}}{\stackrel{y}{3}}$ |  | $\begin{aligned} & \text { अं } \\ & \text { B } \\ & \text { B } \end{aligned}$ | $\begin{gathered} \dot{d} \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{gathered}$ | 空 |  | \％ ＋ 0 0 |
| United States | 1，833 | 27,978 | 21， 111 | 52，089 | 911 | \％，917 | 2，139 | 10， 056 | 1，122 | 9，494 | 15，${ }^{7} 95$ | 25，289 |
| North Atlantic Division | 630 | 12， 297 | 8，941 | 21．238 | 395 | 4，525 | 969 | 5， 494 | 5386 | 6，731 | 8，338 | 15， 069 |
| South Atlantic Division | 38： | 5，269 | 4，670 | 9，989 | 165 | 787 | 238 | 1，0\％\％ | 2031 | 1，051 | 2， 551 | 3，602 |
| South Central Division | 381 | 4， 795 | 4， $47 \%$ | 9，267 | 147 | －998 | 401 | 1，399 | 140 | 662 | 1，362 | 2,024 |
| North Central Division | 334 | 4，605 | 4， $8 \% 4$ | 9，429 | 164 | 1，409 | 329 | 1， 768 | 176 | 769 | 2， 557 | 3，336 |
| Westerm Division．．．．．． | 106 | 1，012 | 1，204 | 2，216 | 40 | －198 | $17 \%$ | $3 \pi 0$ | 69 | 251 | $97 \%$ | 1，258 |
| North Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| New Hampshire | 30 | 870 | 292 | 1，162 | 20 | 433 | 36 | 469 | 23 | 604 | 17 | 75 |
| Vermont | 18 | 236 | 195 | 431 | 12 | 63 | 16 | 79 | 15 | 87 | $12 \%$ | 214 |
| Massachusetts | 95 | 2,120 | 1，498 | 3，618 | 68 | 935 | 211 | 1，146 |  | 1，481 | 1，664 | 3，148 |
| Rhode Island． | 13 | 1，299 | 135 | ， 364 | 7 | 69 | 8 | 77 | 12 | 277 | 192 | 469 |
| Connecticut | 60 | 1，018 | $\tau 07$ | 1，785 | 41 | 307 | 153 | 460 | 49 | 329 | $74 \%$ | 1，076 |
| New York | 187 | 2，781 | 2，471 | 2， 25.2 | 104 | 1，0：3 | 208 | 1，281 | 168 | 1，94\％ | 2，953 | 4，930 |
| New Jersey | 69 | 1，272 | 889 | 2，161 | 36 | 505 | 86 | ， 591 | 63 | 615 | 842 | 1． 487 |
| Pennsylvania－－．．．．．． | 128 | 3，31\％ | 2,185 | 5， 437 | 79 | 981 | 108 | 1，089 | 85 | 1，256 | 1，3：3 | 2,579 |
| South Atlantic Division： <br> Delaware | 1 |  |  |  | ${ }^{4}$ | 18 | 5 | 23 | ＊ | 51 | 92 | 143 |
| Maryland | 44 | 646 | 724 | 1，340 | 18 | 90 | 41 | 131 | 3. | 281 | 703 | 384 |
| District of Columbia | 19 | 141 | 235 | ， 376 | 7 | 16 | ． | 50 | 19 | 75 | 458 | 533 |
| Virginia | 80 | 1，1\％0 | $76 \%$ | 1，982 | 28 | 128 | 29 | 157 | 49 | 305 | 43. | $73 \%$ |
| West Virginia | 12 | 170 | 175 | 345 | 8 | 49 | 13 | 69 | 8 | 36 | 88 | 125 |
| North Carolina | 119 | 1，599 | 994 | 2，593 | 46 | 202 | 57 | 279 | 38 | 110 | 231 | 341 |
| South Car | 35 | 433 | 427 | 862 | 18 | 89 | 57 | 146 | 20 | 129 | $21 \%$ | $3 \pm 1$ |
| Georgia | 63 | 974 | 1，213 | 2,187 | 33 | 137 | 27 | 164 | 23 | 63 | 307 | $3 \% 0$ |
| Florida | 6 | 45 | ， 48 | 93 | 3 | － 8 | 5 | 13 | 5 | 1 | 2 | 28 |
| South Cential Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 87 | 1，936 | 984 | 1， 920 | 41 | 278 | 101 | 341 | 33 26 | 121 | 23.1 | 358 |
| Alabama | 49 | 1， 538 | 490 | 1，038 | 12 | 06 | 1012 | 98 | 19 | 63 | 169 | 23： |
| Mississippi | 39 | $35 \%$ | 347 | 699 | 16 | 45 | 15 | 60 | 4 | 58 | 22 | 80 |
| Louisiana | 26 | 223 | 355 | $5 \% 8$ | 6 | 1t． | 28 | 42 | 25 | 219 | 484 | \％03 |
| Texas | 5.5 | 1，0\％1 | 1，036 | 2，107 | 29 | $21 \hat{1}$ | 143 | 360 | 28 | 110 | 218 | 328 |
| Arkansas | 21 | 287 | 206 | 493 | 6 | $5 \%$ | 12 | 69 | ， | 10 | 6 | 16 |
| Oklahoma | 1 | 0 | 5 | 5 | 0 |  |  |  | ， | 1 | 1 | 1 |
| Indian Territory | 10 | 59 | 76 | 135 | 0 |  |  |  | 1 | 1 | 0 | 1 |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio－－ | 45 | 598 494 | 689 488 | 1，287 | 21 | $25 \%$ 132 | 36 31 | 288 | 33 | 111 | 504 | 615 |
| Illinois | 60 | 651 | 897 | 1，548 | $2 \%$ | 145 | 73 | 218 | 33 | 75 | 616 | 691 |
| Michigan | 18 | 191 | 309 | 500 | 9 | 32 | 34 | 66 | $1 ?$ | 43 | 233 | $2 \pi 6$ |
| Wisconsin | $2 \%$ | 465 | 210 | 675 | 15 | 260 | 28 | 288 | 16 | 164 | 95 | 259 |
| Minnesota | 25 | 445 | 333 | 778 | 13 | 138 | 10 | 148 | 15 | $5 \%$ | 149 | 206 |
| Iowa．． | 32 | 345 | 413 | \％58 | 13 | 11.2 | 31 | ． 143 | 9 | 4 | 41 | 48 |
| Missouri | 70 | 1，019 | 1，039 | 2，058 | 34 | 2 O | 70 | － $3 \times 8$ | 34 | 204 | 581 | 805 |
| North Dakot | 2 | － 6 | 10 | 16 | 2 | 4 | 8 | 6 | 1 | 1 | 18 | 19 |
| South Dakot | 6 | 57 | 75 | 132 | ， | 11 | 11 | 22 | $\stackrel{\square}{\square}$ | 1 | 27 | 28 |
| Nebraska | 15 | 12\％ | 161 | 283 | 8 | 29 | 22 | 51 | ， | 12 | 110 | 122 |
| Kansas | 14 | 212 | 200 | 412 | \％ | 36 | 11 | 47 | 5 | ． | $3 \pm$ | 42 |
| Western Division： <br> Montana |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana Wyoming | 2 |  |  | 46 | 0 |  |  |  | 2 | 0 | 38 | 38 |
| Colorado | 5 | 28 | 36 | 64 | 3 | 7 | 2 | 9 | 2 | 1 | 31 | 35 |
| New Mexico | 1 | 0 | 2 | ， |  |  |  |  | 0 |  |  |  |
| Arizona | 2 | 0 | 9 | 9 |  |  |  |  |  |  |  |  |
| Utah | 9 | 108 | 129 | 237 | 4 | 19 | 13 | 32 | 3 | 20 | 50 | 70 |
| Nevada |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho | 4 | 17 | 36 | 53 | 1 | 6 | 0 | 6 | 1 | 0 | 10 | 10 |
| Washingto | 13 | 87 | 173 | 260 | 4 | 12 | 11 | 23 | 6 | 1 | 104 | 105 |
| Oregon | 15 | 238 | 196 | 434 | 7 | 55 | 16 | \％1 | 11 | 23 | 148 | 171 |
| California | 15 | 534 | 577 | 1，111 | 21 | 99 | 130 | $2: 9$ | 44 | 236 | 593 | 8.99 |

Table 19.-Private high schools and academies-Number of secondary students pursuing certain studies in 1899-1900.


TABLE 20.-Private high sehools and academies-Number of secondary students pursuing certain studies in 1899-1900.

| State or Territory. | Trigonometry. |  |  |  | Astronomy. |  |  |  | Physics. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { ت゙ } \\ & \text { O } \\ & \text { O } \end{aligned}$ |  | $\underset{\underset{\sim}{3}}{\stackrel{\Delta}{3}}$ |  |  | $\begin{gathered} \dot{0} \\ 0 \\ 0 \\ 0 . \\ 0 . \\ 0 . \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{gathered}$ | 盛 | ब हु है E- | - |
| United States | 696 | 3, 501 | 1,852 | 5,353 | 769 | 2,456 | 4, 704 | 7, 160 | 1,305 | 10,405 | 9,685 | 20,090 |
| North Atlantic Division | 212 | 1,567 | 237 | 1,804 | 236 | 945 | 1,571 | 2,516 | 381 | 4,259 | 3,066 | 7,325 |
| South Atiantic Division. | 139 | 602 | 339 | 1,001 | 104 | 320 | 658 | 972 | 230 | 1,653 | 1,546 | 3,199 |
| South Central Division.- | 176 | 769 | 659 | 1,368 | 140 | 587 | 995 | 1,583 | $29 \%$ | 2,311 | 2,294 | 4, 608 |
| North Central Division | 128 | 447 | 412 | 859 | 174 | 512 | 1,069 | 1,581 | 307 | 1,721 | 2,168 | 3,889 |
| Western Division... | 41 | 176 | 145 | 3.21 | 55 | $9: 2$ | 417 | 509 | 92 | 461 | 613 | 1,064 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| New Hampshi | 7 | 43 | 11 | 54 | 12 | 82 | 53 | 135 | 23 | 330 | 72 | $40 \%$ |
| Vermont | 1 | 4 | 0 | 4 | 13 | 35 | 46 | 81 | 15 | 88 | 85 | 173 |
| Massachusetts | 25 | $13 \%$ | 10 | 146 | 32 | 112 | 157 | 269 | 64 | 654 | 376 | 1,030 |
| Rhode Island | 3 | 50 | 0 | 50 | 5 | 9 | 44 | 53 | 13 | 91 | 43 | 134 |
| Connecticut | 20 | 84 | 20 | 104 | 20 | 53 | 181 | 231 | 42 | 194 | 215 | 409 |
| New York | 70 | 516 | 51 | $56 \%$ | 67 | 217 | 457 | 674 | 55 | 1,039 | $1,18 \%$ | 2,2:3 |
| New Jersey | 24 | 216 | 30 | 246 | 25 | 85 | 248 | $3 \% 8$ | 49 | 365 | 294 | 659 |
| Pennsylvania | 60 | 515 | 115 | 630 | 42 | 262 | 289 | 551 | 95 | 1,315 | 600 | 1,915 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Delaware | 2 | 16 | 0 | 16 |  |  |  |  | 4 | 12 | 19 | 31 |
| Maryland | 23 | 155 | 28 | 183 | 14 | 10 | 109 | 119 | $3 \%$ | 165 | 254 | 419 |
| District of Columbia | 10 | 42 | 23 | 65 | 13 | 3 | 98 | 101 | 15 | 46 | 139 | 185 |
| Virginia | 40 | 164 | 118 | $27 \%$ | 18 | 100 | 135 | 235 | 52 | 434 | 301 | 785 |
| West Virginia | 9 | 32 | 14 | 46 | 7 | 28 | 39 | 67 | 10 | 58 | 78 | 136 |
| North Carolina | 20 | 68 | 73 | 141 | 21 | 115 | 74 | 189 | 55 | 498 | 235 | 783 |
| South Carolina | 13 | 36 | 41 | 77 | 10 | 11 | 62 | 73 | 16 | 117 | 79 | 198 |
| Geor'gia | 21 | 88 | 107 | 195 | 14 | 49 | 118 | 167 | 41 | 316 | 423 | 739 |
| Florida. | , |  | 0 | 1 | + | 4 | 17 | 21 | , | 7 | 18 | 25 |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky ---------- | 43 | 163 | 107 | 270 | 30 | $7 \%$ | 145 | 222 | $5:$ | 26.8 | 281 | 543 |
| Tennessee | 40 | 147 | 110 | 257 | 30 | 96 | 153 | 249 | 64 | 413 | $35 \%$ | 770 |
| Alabama | 20 | 78 | 75 | 153 | 17 | 118 | 143 | 261 | 37 | 311 | 291 | 602 |
| Mississipp | 15 | 94 | 60 | 154 | 14 | 44. | 73 | 117 | 39 | 396 | 324 | 720 |
| Louisiana | 13 | 25 | 52 | 75 | 16 | 15 | 142 | 157 | 24 | 102 | 224 | 326 |
| Texas | 39 | 198 | 248 | 446 | 29 | 214 | 325 | 539 | $5 \%$ | 733 | 721 | 1,454 |
| Arkansas | 1 | , | 4 | 8 | 4 | 23 | 14 | 37 | 11 | 68 | 64 | 132 |
| Oklahoma | 0 |  |  |  | 0 |  |  |  | 1 | 0 | 4 | 4 |
| Indian Teriotory | 1 | 0 | 3 | 3 | 0 |  |  |  | 5 | 26 | 23 | 52 |
| North Central Livision: |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Indiana | 13 | 63 | 55 | 118 | 9 | 37 | 61 | 98 | 23 | 163 | $17 \%$ | 346 |
| Illinois | 16 | 40 | 69 | 111 | 31 | 63 | $17 \%$ | 205 | 56 | 344 | 348 | $69 \%$ |
| Michigan | 8 | 34 | 23 | 57 | 10 | 44 | 121 | 165 | 18 | 78 | 195 | 273 |
| Wisconsin | 8 | 44 | 23 | 66 | 10 | 65 | 48 | 113 | 20 | 136 | 92 | 238 |
| Minnesota | 7 | 23 | 14 | 37 | 11 | 39 | 67 | 106 | 22 | 125 | 144 | 269 |
| Iowa. | 9 | $\cdots$ | 13 | 35 | 17 | 59 | 79 | 138 | 30 | 169 | 232 | 401 |
| Missomipi | 41 | 124 | 124 | 248 | 43 | 88 | 284 | 37. | 64 | 323 | 483 | 806 |
| North Dakota | 1 | 1 | \% | 8 | 1 | 1 | 7 | 8 | 2 | 4 | 6 | 10 |
| South Dakota | , |  |  |  | 3 | 5 | 8 | 13 | 6 | 18 | 31 | 49 |
| Nebraska | 5 | 4 | 33 | 17 | 8 | 29 | 41 | 70 | 15 | 83 | 116 | 199 |
| Kansas | ¢ | 11 | 10 | 21 | 10 | 36 | 56 | 92 | 11 | 81 | 62 | 143 |
| Western Division:Montana |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana Wroming. | 1 | 0 | 1 | 1 | 2 |  | 41 | 41 | . 1 | 0 | 12 | 12 |
| Colorado |  |  |  |  | 1 | 14 | 9 | 23 | 5 | 19 | 18 | 37 |
| New Mexic | 1 | 0 | 2 | 2 | 1 | 0 | 6 | 6 | 2 | 0 | 12 | 12 |
| Arizona |  |  |  |  | 1 | 0 | $\stackrel{2}{18}$ | $\stackrel{2}{2}$ | 8 | 0 | 13 | 13 |
| Utah | 3 | 47 | 7 | 54 | 3 | 20 | 13 | 33 | 8 | 151 | 48 | 199 |
| Nevada |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho |  |  |  |  |  |  |  |  | 2 | 4 | 20 | 24 |
| Washingto | 3 | 6 | 24 | 30 | 6 | 12 | 63 | 75 | 10 | 25 | 72 | 97 |
| Oregon | 10 | 24 | 35 | 59 | 11 | 17 | 52 | 69 | 14 | 55 | 54 | 109 |
| California |  |  | 76 | 175 | 30 |  |  | 200 | 48 | 207 | 364 | 571 |

TABLE 21．－Private high schools and academies－Number of secondary students pursuing certain studies in 1899－1900．

| State or Territory． | Chemistry． |  |  |  | Physical geography． |  |  |  | Geology． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\left\|\begin{array}{c} \dot{\sim} \\ \dot{\sim} \\ 0.0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array}\right\|$ | $$ |  | $\begin{gathered} \text { تig } \\ \text { B } \end{gathered}$ |  | 忽 | $\begin{gathered} \text { gi } \\ \text { ت゙ } \\ \text { an } \end{gathered}$ |  | $\left\|\right\|$ |  |  | $\begin{aligned} & \text { تूㅁ } \\ & \text { Hิ } \end{aligned}$ |
| United States | 895 | 5，359 | 4，988 | 10，34\％ | 1，366 | 10，622 | 12，1\％8 | 22， 800 | 596 | 2，728 | 3，829 | 6，557 |
| North Atlantic Division | 339 | 2， 680 | 1，691 | 4，3\％1 | $42 \%$ | 3，265 | 3，518 | 6， 883 | 198 | 1，031 | 1，202 | 2，233 |
| South Atlantic Division | 139 | \％18 | 791 | 1，509 | 297 | 2，199 | 2． 408 | 4，607 | 65 | 24 |  |  |
| South Central Division． | 159 | 8311 | 1，052 | 1，883 | 285 | 2，651 | 2， 85 | 5，503 | 146 | 820 | 991 | 1，811 |
| North Central Division | 196 | 863 | 1， 144 | $\therefore .007$ | $2 \% 1$ | 2，106 | 2，469 | 4，575 | 146 | 523 |  |  |
| Western Division．．． | 66 | $26 \%$ | 310 | $5 \%$ | 86 | 401 | $9: 31$ | 1，332 | 41 | 110 | 405 | 515 |
| North Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine．．．．．．－．．．．．．．．－－ | 18 | 89 | 101 | 190 | 26 | 191 | 245 | 436 | 19 | 91 | 97 | 188 |
| New Hamp | 18 | 202 | 91 | 293 | 19 | 243 | 86 | 3：9 | 11 | 57 | 41 | 98 |
| Vermont． | 10 | 58 | 39 | 97 | 14 | 100 | 148 | 248 | 12 | 42 | 59 | 101 |
| Massachusett | 58 | 395 | 321 | 716 | 44 | 271 | 264 | 535 | 27 | 115 | 150 | 265 |
| Rhode Island | 7 | 64 | 35 | 99 | 8 | 103 | 82 | 185 | ${ }^{4}$ | 12 | 23 | 35 |
| Connecticut | 23 | $10 \pm$ | 104 | 208 | 33 | 167 | 203 | 370 | 14 | 82 | 78 | 160 |
| New York． | 11.2 | \％94 | 516 | 1，340 | 132 | 912 | 1，233 | 2，145 | 67 | 253 | 432 | 717 |
| New Jersey | 29 | 263 | 135 | ＋1：0 | 33 | 340 | 353 | 783 | 12 | 62 | 59 | 121 |
| Pennsylvania | 64 | 709 | 319 | 1，028 | 98 | 968 | 904 | 1，81： | 32 | $28 \pi$ | 261 | 548 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Delaware <br> Maryland | 21 | 116 | 126 | 295 | 1 | 245 | $\begin{array}{r} 19 \\ 352 \end{array}$ |  | 10 | 2 | 65 | 67 |
| District of Col | 10 | 22 | 53 | 75 | 14 | 33 | 93 | 128 | 6 | 5 | 40 | 45 |
| Virginia | 39 | 200 | $1 \% 8$ | $3 \%$ | 59 | 459 | 445 | 904 | 13 | 93 | 13.3 | 228 |
| West Virgi | 9 | 88 | 38 | 73 | 10 | \％ 6 | 74 | 150 | 5 | 36 | 18 | 54 |
| North Carolina | 18 | 13. | $11 \%$ | 254 | 97 | \％ 76 | $62 \%$ | 1，398 | 9 | 38 | 45 | 83 |
| South Caroli | 13 | 68 | 96 | 164 | 30 | 173 | 015 | 388 | 6 | 13 | 21 | 34 |
| Georgia | 21 | \％ 3 | 163 | 236 | 43 | 426 | 524 | 9.50 | 14 | 47 | 53 | 100 |
| Florida． |  |  | 13 | 13 | \％ | 13 | 61 | \％ | 2 | 10 | 8 | 18 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Tennessee | 25 | 11. | $12 \%$ | 24 | 52 | 454 | 403 | ¢ 5 亿 | 42 | $28 \%$ | 241 | 528 |
| Alabama | 16 | 140 | 99 | 292 | 33 | 256 | $3 \%$ | 658 | 17 | 94 | $1: 9$ | 223 |
| Mississipp | 16 | 71 | 63 | 134 | 33 | 330 | 295 | $6 \%$ | 13 | 42 | 63 | 105 |
| Louisiana | 18 | 30 | $1: 9$ | 159 | 30 | 18.5 | 338 | 523 | 16 | 12 | \％ | $8 \%$ |
| Texas． | 37 | 297 | 411 | \％US | 56 | \％11 | 818 | 1，559 | 26 | 258 | 322 | 550 |
| Arkansas． | 4 | 22 | 22 | 44 | 14 | 130 | 100 | 230 | 3 | 25 | 19 | 4 |
| Oklahoma |  |  |  |  | 1 | 0 | 7 |  |  |  |  |  |
| Indian Territory | 2 | 20 | 10 | 36 | 5 | 30 | 35 | 66 |  |  |  |  |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inlinois | 31 | 102 | 197 | 239 | 51 | 20 | 385 | 713 | 18 | \％ | 1 | 116 |
| Michigan | 14 | 68 | 115 | 181 | 11 | 55 | 140 | 195 | \％ | 30 | 133 | －63 |
| Wisconsin | 12 | 100 | 33 | 136 | 20 | 190 | $15 \hat{}$ | 347 | 6 | 60 | 9 | 69 |
| Minnesot | 10 | 50 | 66 | 116 | 18 | 152 | 168 | 320 | 4 | 13 | 25 | 38 |
| Iowa． | 13 | 36 | 98 | 135 | 25 | 166 | 258 | 424 | 18 | $8 \%$ | 144 | 231 |
| Missouri | 49 | $15 \%$ | 272 | 429 | 59 | 508 | 508 | 1，016 | 40 | 90 | 24 | 337 |
| North Dakota | 1 | 0 | 5 | － 5 | 1 | 6 | 2 |  | 1 | 0 | 4 | 4 |
| South Dakota | 2 | ， | 9 | 11 | 5 | $2 t$ | 113 | 137 | ${ }^{3}$ | 12 | 6 | 18 |
| Nebraska | 7 | 20 | 26 | 46 | 15 | 25 | 125 | 180 | 6 | 6 | 51 | 57 |
| Kansas | ， | 43 | 50 | 93 | 14 | 98 | 106 | 204 | 9 | 38 | 40 | 78 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Wyoming |  |  |  |  |  |  |  |  |  |  |  |  |
| Colorado |  | 9 |  | 16 |  | 18 | 42 | 60 |  | 6 | 5 | 11 |
| New Mexic | 2 | 0 | 10 | 10 | 3 | 15 | 23 | 38 | 2 | 0 | 12 | 12 |
| Arizona | 1 | O | 2 | 2 | 2 | 0 | 13 | 13 | 1 | 0 | 2 | 2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nerad <br> Idaho |  |  |  |  |  | 13 |  | 27 | 1 |  |  | 8 |
| Washing | 5 | 2 | 55 | 57 | 10 | 33 | 93 | 120 | 5 | 22 | 76 | 98 |
| Oregon | 11. | 43 | 54 | 97 | 15 | 108 | 152 | 260 | 8 | 15 | 48 | 63 |
| Californi | 37 | 148 | 159 | 307 | 35 | 113 | 444 | $55 \%$ | 16 | 0 | 216 | 216 |

Table 22.-Private high schools and academies-Number of secondary students prirsuing certain studies in 1899-1900.


Table 23．－Private high schools and academies－Number of secondary students pursuing ceriain siudies in 1899－1900．

| State or Territory． | English literature． |  |  |  | History． |  |  |  | Civics． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 㡙 |  | $\begin{aligned} & \text { लूं } \\ & \text { सें } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { तूँ } \\ & \text { H. } \end{aligned}$ | $\left\|\right\|$ | 舀 | － | त्⿺̇ H |
| United S | 1，078 | 18，383 | 22，497 | 40，880 | 1， 202 | 18，099 | 21，91 | 40， 009 | 1，138 | 9，398 | 11，000 | 20，398 |
| North Atlantic Divisio | 596 | 8，497 | 8， $92 \%$ | 17，394 | 596 | 7，334 |  | 15，233 |  | 2，965 | 3，172 | 6，137 |
| South Atlantic Diyision | 310 | 2，648 | 3， 446 | 6，094 | 332 | 3，393 | 3， 76 | 7，160 | 191 | 1，499 | 1，666 | 3， 165 |
| South Central Division． | 322 | 2，974 | 3， 330 | 6，704 | 335 | 3，234 | 4，15 | 7，434 |  | 2，554 | 2，652 | 5，206 |
| North Central Division． | 339 | 3，261 | 4，793 | 8，0ă | 331 | 3 ，271 | 4，61 | 7，881 |  | 1，971 | 2，437 | 4，408 |
| Western Division． | 111 | 1，033 | 1，601 | 2，634 | 108 | 814 | 1，48 | 2，301 | 85 | 409 | 1，073 | 1，48； |
| North Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| New Hampshir | 28 | 586 | 311 | 897 | 28 | 448 | 25 | 707 | 15 | 139 | 84 | 223 |
| Vermont | 16 | 97 | 141 | 238 | 16 | 120 | 15 | $27 \%$ | 15 | 107 | 133 | 240 |
| Massachusett | 93 | 1，456 | 1， 765 | 3,221 | 87 | 997 | 1，07 | 6 2，073 | 16 | 289 | 338 | 637 |
| Rhode Island | 13 | 83 | 162 | 1245 | 13 | $13: 2$ | 19 | 432 | ${ }^{6}$ | 70 | 28 | 98 |
| Connecticut | 53 | 714 | 813 | 1，527 | 56 | 533 | 20 | 1，232 | 26 |  | 198 | 324 |
| New York | 183 | 1，613 | 2，639 | 4，25： | $18 \%$ | 2，091 | 2，\％0 | 3， 4,794 | 115 | 932 | 1，094 | 2， 1126 |
| New Jersey | 65 | 1，140 | 713 | 1，853 | （65） | $6 \overline{1}$ | 78 | 6 1，437 | 29 | 130 | $23: 2$ | 362 |
| Pemnsylvania | 116 | 2,384 | 1，816 | 4，200 | 120 | 2，058 | 1，59 | 3，654 | 70 | 1，050 | $8: 8$ | 1，928 |
| South Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Maryland | 40 | 383 | $\%$ | 1，153 | 38 | 475 | 63 | 1，112 | 26 | 76 | 329 | 405 |
| District of Columbia | 18 | 73 | 328 | 401 | 19 | 95 | 23 | 4 429 | 10 | 41 | 101 | 142 |
| Virginia | 68 | 547 | 498 | 1，045 | 70 | 819 | 6 | （1，445 | 35 | 304 | 232 | 536 |
| West Virginia | 12 | $10 \%$ | 161 | 268 | 13 | 155 | 23 | ＋ 389 | 10 | 118 | 95 | 213 |
| North Carolin | 78 | 800 | 641 | 1，44］ | 100 | 1，074 | Ts | ） $1,8 \times 3$ | $6{ }^{6}$ | 621 | 450 | 1，071 |
| South Carolin | 30 | 201 | 231 | 485 | 30 | 255 | 20 | －521 | 14 | 120 | 112 | ¢3） |
| Georgia | 52 | 480 | 697 | 1，17\％ | 51 | 481 | \％ 5 | 1，239 | 25 | 195 | $25 \%$ | 45. |
| Florida－ | 8 | 19 | 46 | 65 | 7 | 11 |  | 78 | 7 | 14 | 82 | 96 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 78 | 440 | 748 | 1，188 | 76 | 607 | 82 | 1， 429 | 68 | 597 | 658 | 1，2＂7 |
| Tennessee | 72 | 828 | 191 | 1，58\％ | 0 | 71. | 86 | 1，563 | 50 | 459 | 3.31 | \％ |
| Alabama | 36 | 323 | 413 | 735 | 39 | $2 \%$ | 39 | －663 | 18 | 145 | 228 | 383 |
| Mississipp | $3 \pm$ | 22.9 | 330 | 539 | 37 | 331 | 88 | \％ 731 | 35 | $3: 8$ | 394 | ： |
| Teusas．．．．． | 23 | $1 \% 6$ | 289 | 415 | 32 | 173 | 42 | 598 | 13 | 120 | 183 | 303 |
| Texas．．．． | 52 | 776 | 979 | 1，755 | 56 | 955 | 1，08 | 2 2，035 | 52 | 6 6ั | 683 | 1，338 |
| Arpansas． Oklahoma | 15 | 29 | 179 | 399 | 15 | 138 | 8 | 3 23 | 12 | 148 | 10： | 250 |
| Ohlahoma－．－．．．． | 1 | 0 |  | 7 | 1 | 0 |  |  | 1 | 0 |  |  |
| Indian Serritory North Central Division： | 6 | 32 | 31 | 63 | 9 | 78 |  | 170 | 6 | 62 | 33 | J |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Indiana | 28 | 2：8 | $44^{1}$ | ${ }^{1} 698$ | 26 | 298 | 48 | 1，761 | 20 | 156 | 171 | 327 |
| Thlinois | （2） | 44 | 883 | 1，32\％ | 61 | 346 | 82 | 1，175 | 40 | 209 | 350 | 539 |
| Michigan | 18 | 149 | 310 | 459 | 18 | 229 | $3 \times$ | 576 | 15 | 97 | 166 | 253 |
| Wisconsin | 22 | 288 | $2 \% 6$ | 514 | 2 | 392 | 25 | 64. | 15 | 92 | 139 | 231 |
| Minnesot | 29 | 394 | 402 | 796 | 23 | 453 | 33 | 784 | 21 | 269 | 205 | 474 |
| Iowa． | 3 ？ | 288 | 436 | 72 | 30 | 218 | 28 | 503 | 29 | 269 | 305 | $5 \% 4$ |
| Missouri | 69 | 817 | 972 | 1，$\% 89$ | 66 | 710 | 1，11 | 11,821 | 59 | 412 |  | 932 |
| North Dakota | 2 | 3 | 10 | 13 | 1 | 2 |  | 12 | 2 | 14 | 2 | 16 |
| South Dakot | 7 | 37 | 69 | 106 | 6 | 45 |  | 103 | 6 | 78 | 81 | 163 |
| Nebraska | 16 | 79 | 153 | 23\％ | 16 | 90 | 15 | － 266 | 16 | 104 | 168 | 212 |
| Kansas | 14 | 165 | 191 | 356 | 13 | 96 |  | 182 | 12 | 93 | 119 | $21:$ |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Wyoming |  |  |  |  |  |  |  |  |  |  |  |  |
| Colorado | 0 | 21 | 64 | 85 | 6 | 25 | 5 | 75 | 4 | 30 | 29 | 59 |
| New Mexic | 3 | 15 | 13 | 28 | 3 | 15 | 1 | 2 |  | 15 | 8 | 23 |
| Arizona | ， | 0 | 18 | 18 | 2 | 10 | 2 | 30 |  | 0 | 10 | 10 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Washi | 11 | 5 | 163 | 215 | $\stackrel{\square}{9}$ | 21 | 16 | 189 | 10 | 43 | 189 | $23 \%$ |
| Oregon | 14 | 111 | 130 | 241 | 12 | 156 | 16 | －32\％ | 13 | 78 | 180 | 258 |
| California | 59 | 588 | 892 | 1，480 | 60 | 391 | 83 | 1，228 | 42 | 158 | 510 | 668 |

TABLE 24.-Private high schools and academies-Proportion of male and femate students, per cent of students pursuing certain courses, per cent of graduates, etc., in 1899-1900.

| State or Territory. | Total number of secondary students. | Per cent of total number. |  |  |  |  | Percent of gradnates prepared. foi' college. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | College classical prepaia tory students. | College scientific preparatory students. | Graduates in 1900. |  |
| United States-- | 110, 797 | 50.30 | 49.70 | 19.07 | 12.80 | 11.02 | 43.52 |
| North Atlantic Division | 40,776 | 52.56 | 47.44 | 21.09 | 13.56 | 14.83 | 50.49 |
| South Atlantic Division. | 20, 202 | 50.34 | 49.66 | 21.16 | 8.96 | 7.80 | 46.18 |
| South Central Division | 22, 041 | 51.25 | 48.75 | 18.11 | 12.58 | 6.50 | 44.38 |
| North Central Division | 22, 574 | 46. 42 | 53.53 | 15. 29 | 13. 91 | 11.96 | 31. $6 \%$ |
| Western Divisiont -.- | 6,204 | 45.40 | 54.60 | 14.47 | 17.28 | 9.57 | 48.14 |
| North Atlantic Division: |  |  |  |  |  |  |  |
| New H | 2, 2,690 | 43.61 63.15 | 56.39 86.85 | 17.79 | 6.11 9.27 | 13.85 14.30 | 31.44 61.65 |
| Vermont | 1,035 | 47.92 | 52.08 | 10.53 | 8.40 | 17.48 | 36.46 |
| Massachuset | 5,911 | 51.33 | 48.67 | 31.09 | 13.29 | 15.95 | 57.05 |
| Rhode Island | 634 | 57.57 | 42. 43 | 29.81 | 5.2iz | 14.67 | 56.93 |
| Connecticut | 2,809 | 50.23 | $49.7 \%$ | 21.50 | 15. 23 | 17.37 | 44.46 |
| New York | 11,105 | 47.27 | 52. 73 | 19.41 | 13.23 | 15.33 | 44.85 |
| New Jersey | 3,898 | 54. 10 | 45.90 | 31.73 | 16.16 | 16. 98 | 65. 71 |
| Pennsylvania | 10,395 | 58.63 | 41.37 | 15. 14 | 16.48 | 13.23 | 48.13 |
| South Atlantic Division: <br> Delaware | 303 | 51.81 | 48.19 | 9.57 | 18.48 | 14.59 | 40.88 |
| Maryland | 2,311 | 44.85 | 55.15 | 33.55 | 16.98 | 12. 40 | 54.35 |
| District of Colum | 807 | 32.46 | 67.54 | 18.46 | 4.53 | 10.03 | 27.16 |
| Virginia | 3,602 | 54.11 | 45.89 | 18.85 | 8.99 | 6.58 | 31.64 |
| West Virginia | 965 | 46.11 | 53.89 | 15.23 | 3. 63 | 8.81 | 15.29 |
| North Carolina | 6,487 | 56. 88 | 43.12 | 21.19 | 8.25 | 6.82 | 57.53 |
| South Carolina | 1, 739 | 63. 70 | 46.30 | 22.14 | 5.98 | 10.75 | 49.20 |
| Georgia | 3,737 | 43.37 | 56.63 | 24.54 | 8.71 | 5.78 | $\stackrel{1}{4} 1.65$ |
| Florida .-.-......... | 218 | 25. 80 | 74.24 | 19.75 | 0 | 4.03 | 70.60 |
| South Central Division: <br> Kentacky | 4,085 | 49.79 | 50.21 | 19.70 | 10.15 | 7.19 | 41.58 |
| Tenness6e | 5,64.9 | 52.80 | 47.20 | 21.98 | 10.55 | 6.21 | 43.91 |
| Alabama | 2, 365 | 62.16 | 37.84 | 15. 619 | 17.21 | 5. 20 | 68. 29 |
| Mississippi | 1, $97 \%$ | 49.97 | 50.03 | 12. 49 | 14. 46 | 7.18 | 47.83 |
| Louisiana | 1,28; | 50.38 | 49.68 | 10.23 | 10.68 | 8.43 | 54.63 |
| Texas | 4,909 | 50.80 | 49.20 | 19.70 | 14. 67 | 7.27 | 38.55 |
| Arkansas | 1,373 | 54.69 | 45.31 | 14.71 | 11.72 | 4.09 | 40.00 |
| Oklahoma ---. | 1,20 | - 0 | 109.00 | 30.00 | 11. 0 | ${ }^{0}$ | 1.. 0 |
| Indian Territory | 381 | 50.39 | 49.61 | 6.01 | 13.38 | 4. 45 | 1\%.65 |
|  |  |  |  |  |  |  |  |
| Ohio -.---------.---. | 2,604 | 42.02 | 57.98 | 19.09 | 15.18 | 12. 11 | 43. 88 |
| Indinois | 3, 5 | 41.13 | 58.87 | 14.93 | 15. 98 | 9.413 | 21.05 |
| Michigan | 1,175 | 33.70 | 66.30 | 10.81 | 13.27 | 9.61 | 40.21 |
| Wisconsin | 1,462 | 57.45 | 42.55 | 28.64 | 8.39 | 15.32 | 38.39 |
| Minneso | 1,847 | 49.92 | 50.08 | 13.96 | 12.50 | 14.55 | 89.03 |
| Iowa | 2,198 | 46.08 | 53.92 | 13. 60 | 11. 60 | 12.73 | 43.21 |
| Missouri | 4.508 | 50.51 | 49.49 | 14.13 | 12.75 | 9.56 | 38.28 |
| North Dakota | 103 | 67.96 | $3 \% .04$ | 7.76 | 0 | 2.91 | C6. 65 |
| South Dakota | 307 | 43.98 | 56.02 | 20.84 | 30.5) | 14.33 | 65.88 |
| Nebraska | 684 | 40.78 | 59.2\% | 14.31 | 14.47 | 10.52 | - $59.1 \%$ |
| Kansas | 918 | 50.76 | 49.24 | 9.81 | 18.98 | 9.04 | 34.05 |
| Western Division: $\quad$ - ${ }^{\text {W }}$ |  |  |  |  |  |  |  |
| Montana....-. | 66 | 0 | 100.00 | $54.5 \frac{1}{2}$ | 6.06 | 13.48 | 63.66 |
| Wyoming Colorado |  |  |  |  |  |  |  |
| Colorado | 197 | 38. 58 | 61. 48 | 12.69 | 9.64 | 10. 66 | 23.81 |
| Arizona.. | 183 | 23.25 | \%6.75 | 23.25 | 0 | 9.30 |  |
| Utah | 1,616 | 53.21 | 46.79 | 21.65 | 11.80 | 6.18 | 40.00 |
| Nevada |  |  |  |  |  |  |  |
| Idaho | 177 | 49.71 | 59.29 | 4.52 | . 56 | 11.39 | 80.00 |
| Washington | 526 | 28.51 | 71.49 | 14.06 | 12.9\% | 11.97 | 33.33 |
| Oregon | \%96 | 46. 10 | 53.90 | 13.82 | 27.51 | 9.06 | 30.56 |
| California | 2,680 | 45.59 | 54.41 | 14.14 | 21.64 | 11.08 | 59.24 |

Table 25.—Private high schools and academies-Percentages of secondary students pursuing certain studies in 1899-1900.

| State or Territory. | Per cent of total number of secondary students. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Latin. | Greek. | French. | German. | $\begin{aligned} & \text { Alge- } \\ & \text { bra. } \end{aligned}$ | Geometry. | Trig-onometry. | $\begin{aligned} & \text { As- } \\ & \text { tron- } \\ & \text { omy. } \end{aligned}$ | Physics. |
| UnitedState | 47.01 | 9.07 | 22.82 | $18.4 \%$ | 49.39 | 23.72 | 4.83 | 6. 40 | 18.13 |
| North Atlantic Division. | 53.06 | 13.45 | 36.81 | 27.26 | 50.08 | 28.02 | 4.4.2 | 6.17 | 17.96 |
| Soutil Atlantic Division. | 49.19 | 5.07 | 17.83 | 5.43 | 52.37 | 19.66 | 4.95 | 4.81 | 15.87 |
| South Central Division.- | 42. 04 | 6.35 | 9.18 | 6.81 | 51.53 | 22.89 | 6. 20 | 7.18 | 20.88 |
| North Central Division.. | 43. $\% 0$ | 8.20 | 15.46 | 24.21 | 42.81 | 2.14 | 3.98 | 7.33 | 18.03 |
| Western Division .......- | 35.70 | 5.96 | 20.28 | 15.44 | 48.60 | 24.11 | 5.17 | 8. 20 | 17.31 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine | 42.63 | 14.72 | $\begin{aligned} & 16.37 \\ & 29.81 \end{aligned}$ | 1.93 | 50.06 | $\because 2.06$ | 0.13 | 8.09 | 15.78 |
| New Hamp | 44.69 | 18.04 | 29.81 | 13. 35 | 37.35 | 22. 00 | 2.08 | 5. 19 | 15. 46 |
| Vermont | 41.64 | 7.63 | 20.68 | 9.18 | 50.34 | 22.80 | 0.39 | 7.83 | 16.72 |
| Massachuset | 61.21 | 19.89 | 53.26 | 27.07 | 47.51 | 25.41 | 2.47 | 4.55 | 17.43 |
| Rhode Island | $5 \% .41$ | 12.15 | \%4. 13 | 11.67 | 68.61 | 49.84 | \%. 89 | 8.36 | 21.14 |
| Connecticut | 63. 55 | 16.38 | 38.31 | 31.33 | 49.45 | 30.01 | 3. 70 | 9.33 | 14.56 |
| New York | 47.29 | 11.09 | 44.30 | 33.06 | 47.59 | 28.90 | 5.10 | 6.61 | 20.05 |
| New Jersey | 55.69 | 15. 16 | 38.15 | 35.20 | 58.13 | 36. 94 | 6. 31 | 8.41 | 16.91 |
| Pennsylvania | 53.30 | 10.48 | 24.81 | 29.15 | 53.50 | 26.72 | 6.06 | 5.30 | 18.42 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maryland | 59.20 | 56.41 | 42.58 | 26. 53 | 58.90 | 34.61 | 7.91 | 5.14 | 18.12 |
| District of Columbia | 46. 39 | 6. 79 | 63.04 | 16.23 | 44.36 | 28.63 | 8.05 | 12. 52 | 22.92 |
| Virginia | 53.64 | 4.36 | 20.05 | 11. 66 | 57.05 | 23.54 | \%. 69 | 6.50 | 20.41 |
| West Virgi | 35.75 | 6. 42 | 12.95 | 12.01 | 23.51 | 17.82 | 4.77 | 6. 94 | 14.09 |
| North Carolina | 39.97 | 4.30) | 5.85 | 1.76 | 43.61 | 10.31 | 2.17 | 2.92 | 11.30 |
| South Carolina | 49.56 | 8. 40 | 19.61 | 5.41 | 56.30 | 14.84 | 4. 43 | 4.20 | 11.27 |
| Georsia | 58.5 | 4. 35 | 9.90 | 3.18 | 62. 40 | 24.00 | 5. 22 | 4.47 | 19.78 |
| Florida | 37.50 | 5.24 | 11.29 | 0.80 | 66.12 | 10.05 | 0. 40 | 8.47 | 10.08 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Tennessee | 40.75 | 7.59 | 5.40 | 3.82 | 47. 50 | 21.01 | 4.55 | 4.41 | 13. 63 |
| Alabama | 43.46 | 4.14 | 9.81 | 4.61 | 5.76 | 25.41 | 6.47 | 11.04 | 25. 45 |
| Mississipp | 25.36 | 3.06 | 4.05 | 0.76 | 50.99 | 17.65 | 7.74 | 5.92 | 36.42 |
| Louisiana | 45. 03 | 3.28 | 54.68 | 3.28 | 52.26 | 23.01 | 6.01 | 12.25 | 25.43 |
| Texas | 4 4 .90 | 7.33 | 6. 70 | 11.12 | 60.84 | 34.10 | 9.09 | 10.98 | 29.62 |
| Arkansas | 33.40 | 5.03 | 1.17 | 4. 66 | 44.79 | 13.18 | 0.58 | 2. 70 | 9.61 |
| Oklahoma | 25.10 |  | 5.00 | 50.00 | 35.00 | 15. 00 |  |  | 20.00 |
| Indian Territory | 35.43 | 0 | 0.26 | 1.84 | 45. 67 | 8.40 | 0.79 | 0 | 13.65 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Indiana | 44.83 | \%.3\% | 10.17 | 21.83 | 43. 24 | 21.06 | 5.33 | 4.43 | 15.36 |
| Illinois | 43.91 | 6.18 | 19.60 | 23.18 | 30.03 | 19.83 | 3.15 | 6.38 | 19.63 |
| Michigan | 42.55 | 5. 62 | 23.49 | 20.25 | 52.85 | 16. 94 | 4.85 | 14.04 | 23.23 |
| W isconsi | 46.17 | 19.70 | 17.03 | 47.67 | 40.69 | 23.93 | 4. 51 | 7. 73 | 16.28 |
| Minnesot | 42.13 | 8.01 | 11.15 | 38.39 | 41.07 | 22.31 | 2.00 | 5.74 | 14.56 |
| Iowa | 34.53 | 6. 50 | 2.18 | 15.11 | 39.53 | 15.56 | 1.59 | 6.28 | 18.24 |
| Missouri | 45. 43 | 7.28 | 17.85 | 17. 79 | 53.13 | 20.58 | 5.52 | 8.25 | 17.88 |
| North Dak | 15.53 | 5.82 | 18. 415 | 2. 91 | 19.41 | 13.59 | 7.76 | 7. 76 | 9. 70 |
| South Dak | 42.92 | \%. 17 | 9.12 | 25. 41 | 33. 26 | 15.96 |  | 4.25 | 15.96 |
| Nebrask | 41.37 | 7. 46 | 17.84 | 19.88 | 39.50 | 21.93 | 24.85 | 10.23 | 29.09 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Montana Wyoming | 69.69 | 0 | 57.57 | 45.45 | 93.93 | 7.57 | 1.51 | 62.12 | 18.18 |
| Colorado | 33.49 | 1.54 | $1 \% .17$ | 16.73 | 54.31 | 18.27 | 0 | 0 | 18.78 |
| New Mex | 1.94 | 0 |  |  | 33.98 | 1.94 | 1.94 | 5.83 | 11. 65 |
| Arizona | 20.93 | 0 |  |  | 2.98 | 4.65 | 0 | 4.65 | 30.23 |
| Utah | 14.67 | 1.98 | 4.33 | 5.36 | 30.88 | 20.36 | 3.31 | 2.04 | 12.32 |
| Nevad | 29.94 | 3.38 | 5.65 | 16.96 | 31.63 | 20.34 | 0 | 0 | 13.50 |
| Washin | 49.43 | 4.37 | 19.96 | 21.68 | 43.54 | 15.21 | 5.70 | 14.25 | 18.44 |
| Oregon | 54.52 | 8.92 | 21.48 | 38.82 | 74.12 | 21.48 | \%. 41 | 8.67 | 13.69 |
| California | 41.45 | 8.54 | 30.93 | 13.32 | 52.83 | 31.26 | 6.53 | 9. 70 | 21.30 |

TabLe 26.-Private high schools and academies-Percentages of secondary stradents pursuing ceriain studies in 1899-1900.

| State or Territory. | Per cent of total number of secondary students. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Chem- } \\ & \text { istry. } \end{aligned}$ | $\begin{gathered} \text { Phys- } \\ \text { ical } \\ \text { geogra- } \\ \text { phy. } \end{gathered}$ | $\begin{aligned} & \text { Geol- } \\ & \text { ogy. } \end{aligned}$ | Physiology. | Psy-chology. | RhetOiic. | Englis literature. | $\begin{aligned} & \text { His- } \\ & \text { tory. } \end{aligned}$ | Civics. |
| United States | 9.34 | 20.58 | 5.92 | 24.77 | 7.00 | 34.02 | 36.80 | 36.11 | 18.41 |
| North Atiantic Divisio | 10.72 | 16.63 | $5.4 \%$ | 18.42 | 5.58 | 36.52 | 42.66 | 34.21 | 15.05 |
| South Atlantic Division | 7.47 | 22. 80 | 3.11 | 26. 66 | 5.82 | 29.96 | 30.17 | 35.41 | 15.67 |
| South Central Division | 8.51 | 24.97 | 8.22 | 35.69 | 9.60 | 35.84 | 30.43 | 33.73 | 23.62 |
| North Central Division.-- | 9.30 | 21.21 | 6.35 | 23.86 | 8.07 | 31.31 | 37.33 | 36.53 | 20.43 |
| Western Division.... | 9.30 | 21. 41 | 8.30 | 25.02 | \%.24 | 32.70 | 42.46 | 37.09 | 23.89 |
| North Atlantic Division: <br> Maine | \%. 49 | 18.25 | 7.87 | 14.23 | ¢. 00 | ${ }_{\sim}^{* \%} .21$ | 40.23 | 30.8 \% | 13.78 |
| New Hamp. | 11.27 | 12.65 | 3.77 | 10.12 | 2.60 | 31.19 | 31.50 | 27.19 | 8.53 |
| Vermont... | 9.37 | 23.96 | 9.76 | \%4. 44 | 7.44 | 30.34 | 23.00 | 26.76 | 23.19 |
| Massachuset | 12.12 | 9.05 | 4.48 | 12.74 | 7.78 | 43.43 | 54.49 | 35.07 | 10.27 |
| Rhode Island | 15.62 | 29.18 | 5.54 | 22.08 | 7. 48 | 4\%.2\% | 38.64 | 50.79 | 15.46 |
| Connecticu | 7.43 | 13.17 | 6.00 | 21.15 | 5.59 | 43.65 | 54.36 | 43.86 | 11.53 |
| New York | 12.07 | 19.32 | 6.46 | 20.51 | 4.07 | 33.96 | 38.29 | 42.99 | 18.24 |
| New Jersey | 10.20 | 18.55 | 3.10 | 16.50 | 3.62 | 43.64 | $47.5 \frac{1}{4}$ | 36.87 | 9.\%9 |
| Pennsylvania | 9.89 | 17.43 | 5.27 | 21.54 | 7.61 | 35.07 | 40.40 | 35.15 | 13.51 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Delaware | 5.94 13.53 | 6.2\% | 0 2.90 | 13.53 13.31 | 1.32 3.93 | 25.08 38.98 | 19.47 49.83 | 27.72 48.05 | 17. 54 |
| District of | 9.29 | 15.61 | 5.58 | 19.45 | 8. 30 | 32. 09 | 49.70 | 53.16 | 17.59 |
| Virginia | $10.4 \%$ | 25.10 | 6.33 | 23. 82 | 7.91 | 33.56 | 29.01 | 40.12 | 14.88 |
| West Virginia | 7.88 | 15.54 | 5.59 | $13.3 \%$ | 8.29 | 27.15 | 17. 56 | 40.31 | 23.07 |
| North Carolina | 3. 92 | 21.55 | 1.33 | 33.61 | 4.99 | 23.97 | 22.21 | 23. 72 | 15.51 |
| South Caroli | 9.43 | 22.31 | 1. 96 | 25.93 | 4.83 | 20.89 | 27.89 | 29.96 | 13.34 |
| Georgia | 6.83 | 25.42 | 2. 68 | 29.06 | 6.10 | 34.97 | 31.49 | 33.11 | 12.09 |
| Florida | 5.24 | 31.05 | 7.26 | 70.96 | $9.2 \%$ | $4 \pi .98$ | 26.21 | 31.41 | 38.71 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Kentricky Tennessee | 7.81 4.32 | 15.17 | 5.97 9.35 | 31.61 26.75 | 10.92 5.45 | 41.27 | 29.68 27.10 | 34.98 24.81 | 31.26 13.91 |
| Alabama | 10.11 | 27.82 | 9. 43 | 44.82 | 6.42 | 37.63 | 31.12 | 28.03 | 16.19 |
| Mississip | 6.78 | 34.14 | 5.31 | 46.59 | 6.53 | 26.61 | 28.28 | 36.98 | 88.54 |
| Louisian | 12.40 | 40.80 | 6. 78 | 39.63 | 13.18 | 35.41 | 32.37 | 46.72 | 23.63 |
| Texas | 14.42 | 31.76 | 11.81 | 35.28 | 15.64 | 42.23 | 35.75 | 41.49 | 27.05 |
| Arkansas | 3.21 | 16. 75 | 3.21 | 39.98 | 7.43 | $21.2 \%$ | 29.06 | 16.53 | 18.21 |
| Oklahoma | 0 | 35.00 | 0 | 45.00 | 55.00 | 70. 10 | 35.00 | 25.00 | 40.00 |
| Indian Territory | 9.45 | 13. 31 | 0 | $3 \frac{1}{2} .18$ | 5. 2 | 29.66 | 16.54 | 41.62 | 21.93 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohio | 9.43 | 21.11 | 5.54 | 21.61 | 6.45 | 38.50 | 39. 48 | 39.94 | 24.69 |
| Indiana | 13.91 | 21.46 | 5. 24 | 22.32 | 9.40 | 31.86 | 31.54 | 34.39 | 14.78 |
| Illinois | 8.48 | 20.23 | 6.01 | 22.24 | 6.47 | 28.71 | 37.58 | 33.33 | 15.29 |
| Michigan | 15.40 | 16.59 | 5.36 | 19.33 | 13. 10 | 35.91 | 39.06 | 49.02 | 29.38 |
| Wisconsin | 9.30 | 23. 73 | 4. 72 | 21.61 | 9.43 | 32.22 | 35.16 | 44.19 | 15.80 |
| Minnesota | 6.38 | 17.88 | 2.06 | 21.98 | 11. 00 | 37.20 | 43. 64 | 42.45 | 25.66 |
| Iowa. | 6.14 | 19.29 | 10.51 | 29.85 | 5.00 | 29.44 | 3;2.94 | 11.88 | 26.12 |
| Missouri | 9.52 | 22.54 | 7. 48 | 23.40 | 8.69 | 27.82 | 39.68 | 40.39 | 21.78 |
| North Dakot | 4.85 | 7.76 | 3.88 | 22.33 | 2.91 | 4.80 | 12.68 | 11. 65 | 15.53 |
| South Dakota | 3.58 | 44.62 | 5.86 | 57.00 | 14.33 | 18.89 | 34.53 | 33.55 | 52.77 |
| Nebrask | 6.73 | 23.32 | 8.33 | 27.78 | 5. 41 | 31.43 | 33.92 | 38.89 | 30.99 |
| Kansas. | 10.13 | 22. 22 | 8.49 | 26.79 | 5.77 | 29.95 | 38.78 | 19.82 | 23.09 |
| Western Division: |  |  | - | 15.15 |  | 81.81 | 89.39 | 6.06 | 63 |
| Wyomin | 0 | 4.2 .48 | 6. 06 | 10.15 | 10.60 | 81.81 | 80.38 | 6. 6 | 63.1.) |
| Colorado | 8.12 | 30.40 | 5.58 | 31.98 | 12.18 | 44.67 | 43.15 | 38.07 | 29.95 |
| New Mex | 9.71 | 36.89 | 11. 65 | 31.06 | 1.94 | 27.18 | 27.18 | 26.21 | 22.33 |
| Arizo | 4.65 | 30.23 | 4.65 | 6.97 | 0 | 23.25 | 41.86 | 69.76 | 23. 20 r |
| Utah | 4.64 | 13.80 | 6.31 | 20.98 | 12.25 | 24.32 | 25.80 | 23.52 | 11.07 |
| Neva |  |  |  |  |  |  |  |  |  |
| Idaho | 7.35 | 15.25 | 4.52 | 10.73 | 4.52 | 22.60 | 51.41 | 25.98 | 5. 05 |
| Washington | 10.83 | 23.95 | 18. 63 | 37.26 | 10.65 | 31.94 | $40.8 \pi$ | 35.93 | 41.11 |
| Oregon | 12.16 | 32. 66 | 7.79 | 37.56 | 6.91 | 32. 78 | 30.28 | 40.45 | 32.41 |
| California.- | 11.45 | 20.78 | 8.06 | 22.05 | 3.69 | 36. 82 | 55.22 | 45.82 | 31.92 |

Table 27.-Private high schools and academies-Equipment, income, benefactions, and endowments, 1899-1900.



Table 28.—Denominational schools included in the tables of private high schools and academies.


TABLE 29.-Denominational schools included in the tables of private high schools and academies.

| State or Territory. | Lutheran. |  | $\begin{aligned} & \text { Metho- } \\ & \text { dist. } \end{aligned}$ |  | Methodist <br> Episcopal <br> South. |  | Presbyterian. |  | Roman Catholic. |  | $\begin{gathered} \text { Other de- } \\ \text { nomina- } \\ \text { tions. } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| United States |  | 2,0326 | 653245 | 5, 52 | 1542 | 2,86393 |  | 4,57436 | 3611,910 | 15, 872 | 5632 | 4.344 |
| North Atlantic Division South Atlantic Division South Central Division. North Central Division Western Division | $\begin{array}{rrr} \hline 7 & 44 \\ 3 & 13 \\ 1 & 3 \\ 1 & 13 \\ 20 & 108 \\ -1 \end{array}$ |  |  | $\begin{aligned} & 1.811 \\ & 1,3721 \\ & 1.333 \\ & 9.264 \\ & 80 \end{aligned}$ |  |  |  |  | 96 546 <br> 33 172 <br> 51 230 <br> 118 674 <br> 63 288 |  | $\begin{array}{r} 1719 \\ 8 \\ 8 \\ 7 \\ 78 \\ 123 \\ 1284 \\ 1266 \end{array}$ | $\left\{\begin{array}{l} 1,077 \\ 454 \\ 4.30 \\ 1,020 \\ 1,571 \end{array}\right.$ |
| North Atlantic Division: $\square$ - |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine -....... |  |  |  |  |  |  |  |  | 3 11 <br> 28  |  | 1 |  |
| $\checkmark$ Vrmont |  |  | 210 | 140 |  |  |  |  |  |  |  |  |
| Massachusett |  |  |  |  |  |  |  |  | ${ }_{5}^{5} \quad 28$ |  |  |  |
| Rhode Island |  |  | 111 | 102 - |  |  |  |  | $\begin{array}{ll}5 & 36 \\ 4 & 23\end{array}$ |  |  |  |
| New Yorik. | 318 |  |  | 44 |  |  |  | 29 | $46 \quad 260$ |  | 328 |  |
| New Jersey | $1{ }^{1} 6$ | 331 |  | 337 |  |  |  | 186 | 10.55 |  |  |  |
| South Atlantic Division:Delaware |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maryland ${ }_{\text {District }}$ |  |  |  |  | 113 | 225 |  |  | 11. 69 |  | 110 | 17 |
| Virginia |  |  | 32 | 2 7 9 | 320 | 243 | 104 | 402 | 14 |  | 3 -ii | 81 |
| West Virginia |  |  |  |  |  |  |  |  |  | 116 |  |  |
| North Carolina South Carolina | 313 | 98 | ${ }^{6} 19$ | ${ }^{303}$ | 317 | 191 | (1) 33 | ${ }^{4} 85$ | $1{ }_{1}^{1}$ |  | 28 |  |
| Georria . |  |  |  | 964 | 415 | 49 | 219 | 84 | 14 | 18 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Teninessee |  |  | 1029 | 742 |  |  | 821 | 259 |  | 113 | 12 |  |
| Ala bama |  |  |  |  |  |  | 1 | 133 |  |  |  |  |
| Mississippi |  |  |  | 37 | 13 | 54 | 319 | 13 1 | ${ }^{5} 15$ | 161 | 1 | 15 |
| Leuisiana |  | 40 |  | 98 |  |  |  | ${ }^{43} 831$ |  |  |  |  |
|  | 13 | 40 | 3 | 288 | 15 |  |  | 333 | $10 \quad 53$ |  |  |  |
| Oklahoma |  |  |  |  |  |  |  |  | ${ }_{3}^{4}$ | 21 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Indiana. |  |  |  |  |  |  |  |  | 12. | 611 |  |  |
| Illinois. | 28 | $1{ }^{1}$ | 414 | 931 |  |  |  | 114 | $20 \quad 98$ | 818 | 437 | 417 |
| Michigan. |  |  |  |  |  |  |  |  | ${ }_{5}^{9} 47$ |  |  |  |
| Wiscousin |  | 181 |  |  |  |  |  | 90 | ${ }^{9} \quad 76$ | 661 |  |  |
| Miownesot | ${ }^{6} 880$ | 213 |  | 5 |  |  |  | 128) 1 | $\begin{array}{ll}13 & 71 \\ 11 \\ 48\end{array}$ | ${ }_{6}^{635}$ | - |  |
| Missouri |  | 118 | 33 | 35 | 517 | 423 |  | 1641 | 15 888 | 562 | 420 | 259 |
| North Dako |  |  |  |  |  |  |  |  |  |  |  |  |
| South Dako Nubraska Kansas | $\begin{array}{lr}1 & 5 \\ 2 & 12\end{array}$ | ${ }^{35}$ |  | 83 |  |  |  |  | , |  |  |  |
| Nebraska |  |  |  |  |  |  |  | 15 | 9 <br> 3 <br> 12 | 5 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oreyon ${ }_{\text {Caliol }}$ |  |  |  |  |  |  |  |  |  | 3.4 |  |  |
| Calitornia |  |  |  |  |  |  |  | 533 | $3316 \pm$ | 1,336 | 211 | 99 |

Table 30.-Averages of number of teachers, students, and graduates to the public high school, and like averages for the private high school and acadenıy.

| State or Territory. | Public high schools. |  |  |  |  | Private high schools. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \text { Oi } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  | B 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| United Stat | 3.4 | 86.5 | 25.5 | 15.8 | 10.3 | 5.1 | 56.0 | 10.9 | 64.1 | 6.1 |
| North Atlantic Division | 4.6 | 117.0 | 25.5 | 10.6 | 14.1 | 6.4 | 69.8 | 9.4 | $4 \pi .6$ | 9.0 |
| South Atlantic Division | 2.6 | 60.2 | 22.7 | 32.0 | 6.4 | 4.1 | 50.5 | 13.6 | 61.2 | 3.9 |
| South Central Divisior | 2.5 | 58.8 | 23.1 | 27.9 | 5.6 | 3.3 | 53.6 | 15.9 | 76.9 | 3.5 |
| North Central Division | 3.1 | 80.6 | 26.3 | 14.3 | 9.9 | 5.8 | 59.2 | 16.\% | 60.8 | 7. |
| Western Division | 4.\% | 105.0 | 25.2 | 4.0 | 11.8 | 5.3 | 48.6 | 9.2 | 103.5 | 4.6 |
| North Atlantic Division: | \% |  |  |  |  |  |  |  |  | 10.0 |
| New Hamps | 3.0 | 65.0 | 21.5 | 11.5 | 10.1 | 3.9 5.2 | 78.8 | 15.1 | 50.9 | 11.3 |
| Vermont.- | 2.7 | 62.5 | 22.8 | 13.7 | 7.0 | 4.1 | 60.9 | 14.8 | 51.1 | 10.6 |
| Massachusett | 6.4 | 151.7 | 23.8 | 6.6 | 22.4 | 7.1 | 60.9 | 8.4 | 16.2 | 9.7 |
| Rhode Island | 8.2 | 172. 5 | 21.2 | 6.2 | 20.0 | 5.6 | 45.3 | 8.0 | 92.4 | 6.6 |
| Connecticut | 4.8 | 109.6 | 23.0 | 3.7 | 14.8 | 5.5 | 44.6 | 8.1 | 24.4 | 7.7 |
| New York | 5.8 | 160.0 | 28.2 | 13.2 | 13.7 | 7.3 | 54.4 | 7.5 | 66.6 | 7.8 |
| New Jersey | 5.5 | 117.3 | 21.3 | 12.9 | 15.5 | 6.3 | 52.5 | 8.4 | 43.4 | 8.9 |
| Pennsylvania | 3.2 | 80.9 | 26.5 | 11.1 | 12.9 | 6.5 | \%i.6 | 11.8 | 66.1 | 10.3 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |  |
| Delaware <br> Maryland | 3.2 | 80.9 77.6 | 25.7 | 9.5 30.3 | 12.2 | 6.7 | $\stackrel{73.2}{50.3}$ | 11.2 | 33.2 | 11.0 6.2 |
| District of Columbia | 27.4 | 686.2 | 25.0 |  | 71.6 | 6.9 | 38.4 | 5.5 | 59.2 | 3.8 |
| Virginia. | 2.6 | 61.9 | 23.7 | 33.7 | 6.3 | 4.1 | 43.9 | 10.6 | 41.4 | 2.9 |
| West Virginia | 2.5 | 61.1 | 24.4 | 3.5 | 7.4 | 4.7 | 74.2 | 15. 3 | 44.7 | 6.6 |
| North Carolina | 2.0 | 44.9 | 22.5 | 27.6 | 4.4 | 3.0 | 53.2 | 17.4 | 66.5 | 3.4 |
| South Carolina | 2.0 | 38.4 | 19.0 | 40.0 | 4.2 | 3.6 | 48.3 | 13.4 | 59.9 | 5.\% |
| Georgia | 2.2 | 48.7 | 22.6 | 38.5 | 5.0 | 3.4 | 55. 7 | 16.6 | 109.4 | 3.3 |
| Florida | 2.4 | 45.5 | 18.8 | 27.1 | 3.9 | 3.9 | 27.5 | 7.1 | 223.4 | 1.1 |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |
| Kentocky | 3.3 2.2 | 78.8 53.7 | 23.8 | 18.0 40.5 | 7.9 7.4 |  | 43.0 57.0 | 12.4 | 61.3 81. | 3.1 <br> 3.6 <br> 1 |
| Tennesses | 2. 2.0 | 53.7 61.6 | 3.2 20.6 | 40.5 39.0 | 7.4 3.8 | 3.1 2.8 2 | 57.0 43.0 | ${ }_{15.2}^{18.2}$ | 81.2 60.4 | 3.6 <br> 2.2 <br> 8 |
| Mississippi | 2.0 | 40.5 | 20.0 | 39.3 | 3.2 | 4.0 | 45.9 | 14.9 | 79.9 | 3.3 |
| Louisiana | 3.7 | 71.5 | 19.1 | 22.2 | 10.9 | 3.7 | 42.7 | 11.4 | 78.5 | 3.6 |
| Texas | 2.5 | 62.2 | 24.8 | 19.8 | 5.4 | 3.9 | 79.0 | 19.1 | 93.7 | 5.5 |
| Arkansas | 2.1 | 52.9 | 25.0 | 21.9 | 4.8 | 3.2 | 65.4 | 20.2 | 72.2 | 2.6 |
| Oklahoma | 3.0 | 56.0 | i8. 7 |  | 4.7 | 3.0 | 20.0 | 6.6 | 20.0 | 0.0 |
| Indian Territory | 2.5 | 39.3 | 15. 7 | 57.3 | 1.0 | 2.6 | 34.6 | 13.1 | 150.0 | 1.5 |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |
| Ohio | 2.5 | 67.4 | 26.6 | 24.8 | 8.8 | 5.9 | 53.7 | 8.9 | 39.8 | 6.3 |
| Indiana | 2.9 | 69.1 | 23.8 | 15.0 | 8.4 | 7.6 | 81.9 | 10. 7 | 80.6 | 7.7 |
| Illinois | 4.1 | 108.9 | 26.4 | 7.6 | 13.4 | 5.9 | 55.1 | 9.3 | 57.2 | 8.3 |
| Michigan | 3.7 | 98.0 | 26.5 | 13.1 | 11.3 | 6.6 | 58.7 | 8.7 | 113.2 | 5.1 |
| Wisconsin | 3.4 | 89.3 | 26.1 | 5.2 | 11.5 | 7.5 | 63.5 | 8.4 | 44.4 | 9. 7 |
| Minnesota | 4.4 | 167.0 | 24.1 | 3.2 | 12.7 | 6.1 | ${ }^{63} .7$ | 10.4 | 107.5 | 9.3 |
| Iowa. | 3.1 | 84.4 | 27.4 | 9.1 | 10.9 | 4.6 | 62.8 | 13.4 | 77.7 | 8.0 |
| Missouri | 3.2 | 88.1 | 27.7 | 9.9 | 9.2 | 5.2 | 60.1 | 11.5 | 40.8 | 5.7 |
| North Sakota | 2.4 | 41.9 | 17.4 | 5.3 | 4.4 | 3.5 | 51.5 | 14.7 | 123.0 | 1.5 |
| South Dakota | 2.0 | 42.9 | 22.0 | 20.4 | 5.8 | 5.4 | 43.8 | 8.1 | 47.8 | 6.3 |
| Nebraska | 2.2 | 60.8 | 27.9 | 24.0 | 7.9 | 4.5 | 36.0 | 8.0 | 59.2 | 3.8 |
| Kansas | 2.6 | 73.5 | 28.8 | 9.0 | 9.0 | 4.7 | 65.6 | 13.9 | 4!. 1 | 5. |
| Western Division: Montana | 3.6 | 86.1 | 24.0 | 11.0 | 8.8 | 2.3 | 22.0 | 9.4 | 233.3 | 3.0 |
| W yoming | 2.4 | 51.0 | 21.0 | 15.6 | 7.3 |  |  |  |  |  |
| Colorado | 5.3 | 131.3 | 25.6 | 3.6 | 13.3 | 6.6 | 32.8 | 4.9 | 146.5 | 3.5 |
| New Mex | 2.9 | 34.7 | 12.2 |  | 2.4 | 3.7 | 23.7 | 6.9 | 63.0 | 2.0 |
| Arizona | 4.0 | 86.0 | 21.5 |  | 13.5 | 1.5 | 21.5 | 14.3 | 72.0 | 2.0 |
| Utah | \%. 8 | 223.0 | 28.6 |  | 22.2 | 5.7 | 124.3 | 21.8 | 89.1 | 7.7 |
| Nevada | 2.4 | 47.9 | 19.6 | 6.7 | 7.4 |  |  |  |  |  |
| Washo ..... | 2.3 2.9 | ${ }_{73 .}^{69.8}$ | 27.0 23.3 |  | 6.8 8.1 |  | 35.4 40.5 4 | 10.5 7.1 | 53.09 | 4.0 4.8 |
| Washington | 2. 9 | ${ }^{73.7} 7$ | 25.3 31.9 | 9.6 5.9 | 8.1 13.9 | 5.7 4.3 4. | 40.5 41.8 | 7.1 | 73.3 90.6 | 4.8 3.7 |
| California | 4.8 | 121.2 | 24.9 |  | 14.2 | 5.7 | 42.5 | \%.2 | 112.5 | 4.7 |

Table 31.-Combined statistics of puỏlic high schools and private high schools and academies-Number of schools, instructors, and students in 1899-1900.

| State oi Territory. | Tetal schools. | $\begin{aligned} & \text { Total } \\ & \text { second } \\ & \text { ary } \\ & \text { teach- } \\ & \text { ers. } \end{aligned}$ | Total second-ary strodents. | Miale. |  | Female. |  | Classical pre paratory students. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number. | Per cent. | Number. | Per cent. | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | Per cent. |
| United Stat | 7,983 | 30,489 | 630,018 | 2\%1,941 | 43.16 | 358, 107 | 53.84 | 52, 409 | 8. 32 |
| North Atlanti | 2,117 | 10,964 | 210,181 | 94, 756 | 45.69 | 115, 415 | 54.91 | 21,613 |  |
| South Atlantic Divisi | 849 | 2,825 | 47,215 | 20, 7 | 43.89 | 26,491 | 56.11 | 6,209 | 13.15 |
| South Central Division | 1,092 | 3,104 | 61, 710 | 27,378 | 41.37 | 31, 332 | 55.63 | 7,075 | 11.47 |
| North Central Division | 3,527 | 11,798 | 276,390 | 114,935 | 41.61 | 161,395 | 58.39 | 11,998 | 5.42 |
| Western Division | 398 | 1, 798 | 34,552 | 14,0\%8 | 40.74 | 20, 474 | 59.26 | 2,511 | 7.2\% |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine-...- | $18 \%$ 90 | $\begin{aligned} & 471 \\ & 341 \end{aligned}$ | 11, 138 | $\begin{aligned} & 4,870 \\ & 3,244 \end{aligned}$ | 43.72 | 6.2.8 | 56.28 | 1,505 | 13.61 |
| Vermont | 72 | 221 | 4,473 | 1,978 | 4i.22 | $\stackrel{3}{2,490}$ | 5.78 | 259 | ${ }_{6.01}$ |
| Massachusett | 334 | 2,196 | A1, 8 235 | 18, $\%$ 2 | 44.80 | 23,103 | 55.20 | 6,694 | 16. 60 |
| Rhode Island | $3 \pm$ | 242 | 4,084 | 1,841 | 45.08 | 2,243 | 54.92 | 45.3 | 11.07 |
| Connecticut | 137 | 693 | 10,916 | 4,9:3 | 45.15 | 5,987 | 54.85 | 1,233 | $11.5 \%$ |
| New York | 582 | 3,704 | 73, 471 | 34,269 | 46.64 | 39,202 | 53.36 | 6,151 | 8.33 |
| New Jersey | 170 | 991 | 15, 158 | 6,361 | 41.96 | 8,797 | 59.04 | 1,881 | 12.41 |
| Pemnsylvania | 511 | 2,093 | 42, 882 | 18,5\% | 43: 29 | 24,260 | 56.71 | 2, 0 | 6. 28 |
| South Atlantic Division: |  |  |  |  |  |  |  |  | 24 |
| Maryland | 97 | 459 | 6,2\%0 | 2, \%28 | 43.93 | 3,512 | 56.01 | 638 | 10.17 |
| District of C | 20 | 283 | 4,238 | 1,575 | 37.16 | 2,663 | 6.2. 84 | 285 | 6. 73 |
| Virginia | 152 | 521 | 7,932 | 3,545 | 44.69 | 4,387 | 53.31 | 93. | 11.75. |
| West Virg | 45 | 141 | 2,020 | 1,120 | 38.36 | 1,809 | 61.64 | 240 | 8.20 |
| North Carol | 143 | 414 | 7,430 | 4,095 | 55.11 | 3,335 | 44.89 | 1,441 | 19.40 |
| South Caro | 140 | $3 \pm 0$ | 5,73\% | 2,623 | 45.81 | 3,109 | 54.19 | 945 | 16.47 |
| Georgia | 187 | 484 | 9,582 | 3, $¢ 23$ | 39.90 | 5,759 | 60.10 | 1,556 | 16. 21 |
| Florida-... | 42 | 115 | 1, \%3] | $6: 1$ | 33.47 | 1,130 | 64.53 | 101 | 5. 77 |
| Kentucky | 165 | 562 | 9,602 | 4,337 | 45.17 | 5,265 | 54.83 | 1,217 |  |
| Tennessee | 200 | อэ๐ | 11,071 | 5, 142 | 46.45 | 5,929 | 53.55 | 1,610 | 14.54 |
| Alabama | 117 | 339 | 6,182 | 2, 707 | 43. 79 | 3,475 | 56.21 | 624 | 10.09 |
| Mississippi | 143 | 335 | 6, $0 ; 2$ | 2,606 | 43.22 | 3,423 | 56. 78 | 853 | 14.15 |
| Louisiana | 61 | 228 | 3,497 | 1,460 | 41. 75 | 2,03\% | 58.25 | 193 | 5.58 |
| Texas | 30: | 848 | 19, 838 | 8,57\% | 43.21 | 11,266 | 56.79 | 2,076 | 10.46 |
| Arkansas | 82 | 197 | 4,597 | 2, 122 | 46. 16 | 2, 475 | 53.84 | $45 \%$ | 9.94 |
| Oklahoma |  | 21 | 356 | 117 | 32.87 | 239 | 67.13 | 17 | 4.78 |
| Indian Territory | 15 | 39 | 538 | 315 | 58.55 | 223 | 41.45 | 31 | 5. $\%$ \% |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Indiana | 409 | 1.315 | 28, 528 | 12,244 | 42. 77 | 16,384 | 5\%.23 | 1,514 | 5.20 |
| Inlinois | 408 | 1,796 | 40,971 | 16, 120 | 39.34 | 24,851 | 60.66 | 2,159 | $5.2 \%$ |
| Michigan | 314 | 1,220 | 29.985 | 12,542 | 41.83 | 17,444 | 58.17 | 1,054 | 3.51 |
| Wisconsin | 234 | 964 | 22,088 | 9,590 | 43.42 | 12,498 | 54.58 | 1,222 | 5.83 |
| Minnesot | 144 | 688 | 14, 157 | 5, $9 \pm 2$ | 41.97 | 8,215 | 58.03 | 626 | 4.42 |
| Iowa | 379 | 1,2\%4 | 31,220 | 12,786 | 40.95 | 18,434 | 59.05 | 1,668 | 5.31 |
| Missouri | 309 | 1,137 | 25, 114 | 10, 485 | 41. $\% 5$ | 14, 629 | 58.25 | 1,537 | 6.12 |
| North Dakot | 29 | 72 | 1,233 | 51\% | 41.52 | 721 | 58.48 | 111 | 9.00 |
| South Dakota | 68 | 157 | 2,924 | 1,246 | 42.61 | 1,648 | 57.39 | 223 | 7.62 |
| Nebraska | 269 | 631 | 15, 892 | 6,332 | 39.84 | 9,5ı0 | 60.16 | 839 | 5.28 |
| Kansas. | 217 | $58 \pm$ | 15,831 | 6,336 | 40.02 | 9,495 | 59.98 | 1,699 | 94 |
| Western Division: Montana | 22 |  | 1,701 | 642 | 37.74 | 1,059 | 6, 26 | 105 |  |
| Wyoming | 7 | 17 | 1,357 | 15 ² | 43. 42 | 202 | 56. 58 | 18 | 5.04 |
| Colorado | 50 | 271 | 6,107 | 2,413 | 39.51 | 3,694 | 60.49 | $37 \%$ | 6.17 |
| New Mexic | 11 | 35 | ${ }^{316}$ | 144 | 41.62 | 202 | 58.38 | 25 | 7.23 |
| Arizona | 4 | 11 | 215 | 67 | 31.16 | 148 | 68.84 | 11 | 6.51 |
| Utah | 18 | 113 | 2,731 | 1,351 | 49.47 | 1,380 | 50.53 | 425 | 15.56 |
| Nevada | 9 | 22 | 431 | 164 | 38.05 | $20 \%$ | 61.95 | 45 | 10.41 |
| Idaho | 13 | 35 | 663 | 304 | 45.85 | 359 | 54.15 | 26 | 3.92 |
| Washingt | 60 | 211 | 3, 989 | 1,476 | 37.00 | 2,513 | 63. 00 | 263 | 6.59 |
| Oregon | 36 | $1+2$ | 2,712 | 1,110 | 40.93 | 1,602 | 59.07 | 261 | 9.62 |
| Californi | 168 | 866 | 15,300 | 6,252 | 40.86 | 9,048 | 59.14 | 952 | 6.22 |

Table 32.-Combined statistios of public high schools and private high schools and academies-College preparatory students and graduates in 1899-1900.

| State or Territory. | Scientific preparatory students. |  | Total college preparatory students. |  | Graduates in 1300. |  | Graduates prepared for college. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | $\underset{\text { ber. }}{\text { Num. }}$ | Per cent. | $\begin{aligned} & \text { Num- } \\ & \text { iver. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | Per cent. |
| United States | 39,108 | 6.21 | 91,517 | 14.53 | 73, 953 | 11. 74 | 21,336 | 82.95 |
| Noith Atlantic Divisio | 11, 834 | 5.63 | 33, 447 | 15.91 | 20,511 | 12.61 | 8, 209 | 96 |
| South Atlantic Division | 2,450 | 5.19 | 8,659 | 18.34 | 4,449 | 9.42 | 1,466 | 32.95 |
| South Central Division | 4,555 | 7.33 | 11,634 | 18.85 | 5,245 | 8.50 | 2,001 | 38.15 |
| North Central Division | 10, 383 | 5.93 | 31,381 | 11.35 | 33, 965 | 12.29 | 11,045 | 32. 52 |
| Westera Division. | 3,885 | 11.24 | 6,396 | 18.51 | 3, 883 | 10.95 | 1,645 | 43.48 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |
| Maine -......-........... | 45.4 | 4.08 | 1,959 | 17. 59 | 1,508 | 13. 54 | 410 | 2\%. 19 |
| New Fampsb | 416 | 6. 60 | 1,131 | 17.99 | -949 | 15.05 | 366 | $3 \times .57$ |
| Vermont | $37 \%$ | 8.43 | 646 | 14.44 | 566 | 12.65 | 198 | 34.98 |
| Massachusett | 2, 458 | 5.88 | 9, 153 | 21.88 | 6,2058 | 14.95 | 1,908 | 30.49 |
| Khode Island | 143 | 3.50 | - 595 | 14.57 | 493 | 12.07 | 187 | 34.93 |
| Connecticut New York. | - $\begin{array}{r}859 \\ 3,6.9 \\ \hline\end{array}$ | 7.81 4.91 | 2,110 | 19.33 | 1,580 | 14.47 | ${ }^{4} 4$ | 30.19 |
| New York New Jersey | 3, 69\% ${ }^{\text {a }}$ | 4.91 | $\stackrel{9}{9}$ | 13.28 | 6,782 | 9.23 | 2,373 | 34.93 |
| New Jersey | 2,55\% | 6.41 5.96 | - 2,88 | 18.82 | $\underline{2,147}$ | 14. 14.56 | 692 | 33.23 |
| South Atlantic Divisiou: |  |  |  |  |  |  | 1,080 | 2. 66 |
| Deiaware | 95 | 7.01 | 156 | 12.25 | 203 | 14.98 | 53 | 2.11. |
| Maryland | 440 | 7.02 | 1,0\%8 | 17.19 | 730 | 11.64 | 229 | 31.37 |
| District of | 137 | 3.23 | $4 \% 2$ | 9.96 | 439 | 10.36 | 80 | 18.22 |
| Virginia | 385 | 4.85 | 1,31\% | 16.60 | 678 | 8.55 | 155 | 22.86 |
| West Virgi | 64 | 2.19 | 304 | 10.41 | 321 | 10.99 | 63 | 19.63 |
| North Carolin | 541 | 7.28 | 1.982 | 26.68 | 502 | 6. 76 | 291 | 57.97 |
| South Carolina | 242 | 4.22 | 1,187 | \%0.69 | 625 | 10. 89 | 261 | 41.76 |
| Georgia | 443 | 5.15 | 2,049 | 21.39 | 813 | 8.48 | 814 | 38.62 |
| Florida | 53 | 3.03 | 154 | 8.80 | 133 | \%.88 | 20 | 14.49 |
| South Central Division: |  |  |  |  |  |  |  |  |
| Kentucky | 845 | 7.64 | 2,455 | 22.18 | 1,096 | 9.90 | 336 | 34.66 |
| Alabama | 603 | 9.76 | 1,22\% | 19.85 | 1, 360 | 5. 82 | 151 | 41.94 |
| Mississippi | 489 | 8.11 | 1,342 | 22.26 | 465 | 7.71 | $22!$ | 48.60 |
| Louisiana | 227 | 6.49 | 420 | 12.01 | 445 | 12.73 | 156 | 3.5. 06 |
| Texas | 1,356 | 6.84 | 3, 43\% | 17.30 | 1,639 | 8.26 | 639 | 39.66 |
| Arkansas | \%0 | 5.66 | 717 | 15. 60 | 345 | 7. 50 | 107 | 31.01 |
| Orlahoma. | 13 | 3.63 | 30 | 8.43 | 28 | \%.87 | 17 | 60.71 |
| Indian Territory | 51 | 9.48 | 82 | 15.24 | 21 | 3.90 | 3 | 11.29 |
| North Central Division: |  |  |  |  |  |  |  |  |
| Ohio -...- | 2,056 | 4.85 5.10 | 5,600 2,973 | 10.35 10.39 | 6,271 3,221 | 12.9\% | 1,748 | 27.87 25.8 .8 |
| Illinois | 2. 292 | 5. 59 | 4, 451 | 10.85 | 5, 127 | 12.51 | 1,519 | 29.63 |
| Michigan | 1,747 | 5.83 | 2,801 | 9.34 | 3,417 | 11.50 | 1, 279 | 37.10 |
| Wisconsin | 955 | 4.46 | $2,20 \%$ | 9.999 | 2. 88. | 13. 06 | 816 | 24. 29 |
| Minnesot | 1,965 | 13.88 | 2,591 | 18.80 | 1,735 | 12. 26 | 893 | 51.82 |
| Iowa. | 1,840 | 5.39 | 3,508 | 11.24 | $4,02 \%$ | 12.90 | 1,263 | 31.49 |
| Missouri | 1, 422 | 5.65 | 2,059 | 11. 78 | 2,573 | 10.25 | ${ }^{693}$ | 30. 8.3 |
| North Dakota | 101 | 8.19 | 212 | 17.19 | 123 | 9.98 | 11 | 57.72 |
| South Dakota | 266 | 9.10 | 489 | 16.72 | 395 | 13.51 | 170 | 43. 04 |
| Nebrask | 1,316 | 8. 28 | 2,155 | 13. 56 | 2,047 | 12.88 | 713 | 34.83 |
| Kansas | 931 | 5.90 | 2,033 | 12. 34 | 1,912 | 12.08 | 885 | 45.89 |
| Western Division: Montana M.... | 208 | 12.2 | 313 | 18.40 | 176 | 10.35 | 70 | 0 ~ 7 |
| Wyoming | 11 | 3.08 | 29 | 8.12 | 51 | 14.29 | 23 | 45.10 |
| Coloredo | 650 | 10.65 | 1,027 | 16.82 | 608 | 9.96 | 273 | 41.9 |
| New Mexic | 25 | 7.22 | 50 | 14.45 | 25 | 7. 23 |  | 8i. 014 |
| Arizona | 26 | 12.09 | 49 | 18.60 | 31 | 11.42 | 7 | 23.58 |
| Utah | 227 | 8.31 | $65 \%$ | 23.87 | 811 | 7. 73 | 63 | 3\%\% \% 0 |
| Nevada | 21 | 4.87 | 66 | 15.31 | $6{ }^{2}$ | 15.55 | 29 | 43. 88 |
| Idano. | 24 | 3.62 | 50 | ${ }^{7.54}$ | 74 | 1116 | 27 | 34.49 |
| Washing | 227 | 5.69 | 490 | 12.28 | 445 | 11.16 | 205 | 46.07 |
| Oregon | 330 | 12.17 | 591 | 21.79 | 309 | 11.39 | 67 | 21.65 |
| Caliiornia | 2,136 | 13.96 | 3,088 | 20.18 | 1,786 | 11.67 | 866 | 48.49 |

PABLE 33.-Combined statisiics of public high schools and private high schools and academies-Secondary studients in certain studies in 1899-1900.


Table 34.-Combined statistics of public high schools and private high schools and academies-secondary students in certain studies in 1899-1900.

| State or Territory. | German. |  |  | Algebra. |  |  | Geometry. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools reporting. | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | Per cent. | Schools reporting. | $\underset{\text { ber. }}{\text { Num- }}$ | Per cent. | Schcols report- ing. | Number. | Per cent. |
| United States | 2,902 | 94, 873 | 15.06 | 7,898 | 347,013 | 55.08 | 6,943 | 168,518 | 26. $\% 5$ |
| North Atlantic Division | 1,186 | 41,308 | 19.65 | 2,089 | 105,441 | 50.64 | 1,941 | 56,412 | 26.84 |
| South Atlantic Division | 203 | 4,569 | 9.68 | 833 | 29,39:2 | 62.25 | 650 | 12,425 | 26.32 |
| South Central Division | 205 | 3,441 | 5. 58 | 1,078 | 39,951 | 64. 74 | 941 | 17, 440 | 28. 26 |
| Norch Central Division | 1,139 | 40,898 | 14.80 | 3,509 | 150, 660 | 54.51 | 3,065 | 70,810 | \%5.62 |
| Western Division ... | 169 | 4, 657 | 13.48 | , 389 | 20,569 | 59.53 | , 346 | 11,431 | 33.08 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| New Hampsh | 26 | 497 | 7. 88 | 88 | 2,650 | 42.04 |  | 1,663 | 26.38 |
| Vermont. | 3 | 277 | 6.19 | 72 | 1,951 | 43.62 | 68 | 1,081 | 2417 |
| Miassachuset | 183 | 5,802 | 13. 86 | 330 | 19,761 | 47.21 | 315 | 12, 548 | 29.93 |
| Rhode Island | 23 | 553 | 13.54 | 33 | 2,193 | 53. 70 | 28 | 1,363 | 33.37 |
| Connecticut | 94 | 2,296 | 21.03 | 133 | 5,6:0 | 51.48 | 118 | 3,047 | 27.91 |
| New York | 48.2 | 18,247 | 24.84 | 572 | 31,268 | 42.56 | 545 | 16,516 | 22. 52 |
| New Jersey | 119 | 4,972 | 32. 80 | 167 | 9,684 | 63. 69 | 153 | 4,146 | 27.35 |
| Pennsylvania | 208 | 8, $\frac{1}{29}$ | 19.85 | 507 | 27,348 | 63.92 | 403 | 13,025 | 30.45 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maryland | 49 | 1,821 | 29.69 | 94 | 4,515 | 72. 01 | 94 | 3,512 | 56.01 |
| District of | 16 | 771 | 18.19 | 24 | 1,459 | 34.43 | 22 | 897 | 21.17 |
| Virginia | 60 | 964 | 12.15 | 151 | 5,019 | 63.19 | 119 | 1,928 | 24.31 |
| West Virgin | 14 | 253 | 8. 66 | 44 | 1,704 | 58.36 | 40 | 716 | 24.52 |
| North Carolin | 17 | 114 | 1.53 | 139 | 3,482 | 46.86 | 82 | 868 | 11.68 |
| South Carol | 19 | 245 | 4.27 | 138 | 4,0\%2 | 70.11 | 91 | 989 | 17.24 |
| Georgia | 17 | 234 | 2.65 | 184 | 7,19\% | 75.03 | 156 | 2,734 | 28.53 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Tennessee | 33 | 335 | 3.03 | 194 | 6,384 | 57.66 | 17. | 2,786 | 2.16 |
| Alabama | 20 | $18 \%$ | 3.62 | 113 | 4,111 | 66. 59 | 99 | 1,890 | 30.57 |
| Mississippi | 6 | 27 | 0.45 | 143 | 3, 833 | (63.58 | 104 | 975 | 16.17 |
| Lovisian | 5 | 42 | 1.20 | 63 | 2,380 | 68.06 | 55 | 1,137 | 32.51 |
| Texas. | 55 | 1,187 | 5.98 | 300 | 14,236 | 71. 76 | 290 | 7,163 | 36.1* |
| Arkansas | 14 | 178 | 3.87 | 81 | 2,891 | 67.89 | 70 | 1,019 | 22.17 |
| Oklahoma. | 3 | 21 | 5. 90 | 7 | 212 | 67.98 | 6 | 101 | 28.37 |
| Indian Territory | 1 | 7 | 1.30 | 14 | $23 \%$ | 44.05 | 7 | 4 | 8.18 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Indiana | 105 | 3,762 | 13.14 | 408 | 16,731 | 58. 44 | 347 | 7,814 | 27.29 |
| fllinois . | 147 | 6,850 | 16.72 | 405 | 20,249 | 49. 42 | 369 | 10,771 | 26.29 |
| Michigan | 152 | 4,744 | 15.82 | 314 | 15,658 | 52.22 | $28 \%$ | 5,906 | 19.90 |
| Wisconsin | 156 | 5, 635 | 25.51 | 258 | 9,797 | 44.35 | 241 | 4,973 | 22.51 |
| Minnesota | 8: | 3. 150 | 21.54 | 143 | 6,781 | 47.90 | 137 | 4,318 | 30.71 |
| Iowa | 91 | 3,077 | 9.86 | $37 \%$ | 15,756 | 50.47 | 336 | 7,293 | 23.36 |
| Missouri | 81 | 3,388 | 13.49 | 304 | 15, 948 | 63.50 | 260 | 6,112 | 24.34 |
| North Dakote | 3 | 72 | 5.84 | 29 | 703 | 57.02 | 27 | ${ }_{6} 21$ | 26.03 |
| South bakota | 19 | 1341 | 11.66 | 63 | 1,596 | 54.58 | 46 | 6. 691 | 23.63 |
| Nebrask | 65 | 1,698 | 10.68 | 267 | 10,365 | 65. 23 | 244 190 | 6,031 4,272 | 37.95 66.99 |
| Kansas <br> Western Division: | 68 | 1,685 | 10.64 | 217 | 9,713 | 61.25 | 190 | 4,272 | 26.99 |
| Western Division: Montana | 5 | 346 | 20.34 | 22 | 1,105 | 61.96 | 19 | 432 | 25.40 |
| Wyoming | 2 | 37 | 10.35 | 7 | 192 | 53.78 | 5 | 97 | 27.17 |
| Colorado | 34 | 1,447 | 23. 69 | 50 | 3,568 | 58.42 | 46 | 2,177 | 35.65 |
| New Mexi | 1 | 4 | 1.16 | 10 | 205 | 59. 25 |  | 4.5 | 13.01 |
| Arizona | 1 | 11 | 5.1\% | 4 | 103 | 47.91 | 3 | 52 | 24.19 |
| Utah | 9 | 293 | 10.73 | 15 | 1,296 | 47.46 | 13 | 915 | 33.50 |
| Nevada | 2 | 8 | 1.85 | 9 | 354 | 82. 13 | 9 | 168 | 38.98 |
| Idaho | 2 | 36 | 5. 43 | 11 | 342 | 51.58 | 9 | 149 | 22.47 |
| Washingt | 14 | 461 | 11.56 | 59 | 2,301 | 57. 68 | 48 | 1,035 | 20.97 |
| Oregon | 16 | 541 | 19.95 | 37 | 1,881 | 67.15 | 31 |  | 23.93 |
| California | 83 | 1,473 | 9.63 | 165 | 9,28\% | 60.67 | 156 | 5, 713 | 37.33 |

Table 35.-Combined siatistics of public high schools and private high schools and academies-secondary students in certain studies in 1899-1900.

| State or Territory. | Trigonometry. |  |  | Astronomy. |  |  | Physics. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools reporting. | Number. | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Schools reporting. | $\underset{\text { Ner }}{\text { Num- }}$ | Per cent. | Schools reporting. | $\begin{gathered} \text { Num. } \\ \text { ber. } \end{gathered}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ |
| United States | 1,514 | 15,268 | 2.42 | 1,764 | 21,595 | 3.43 | 6,203 | 118,936 | 18. 88 |
| North Atlantic Division | 458 | 4,782 | 2.28 | 684 | 8,126 | 3.87 | 1,584 | 36,888 | 17.55 |
| South Atlentic Division.- | 235 | 2,244 | 4.75 | 157 | 1,842 | 3.90 | 491 | 10,065 | 21.32 |
| South Central Division.- | 352 | 3,283 | 5.32 | 233 | 2, 788 | 4.52 | 853 | 14,584 | 23.63 |
| North Central Division.- | 347 | 3,805 | 1.38 | 609 | 7,785 | 2.82 | 2,955 | 50, 860 | 18.40 |
| Western Divison.......... | 122 | 1,154 | 3.34 | 81 | 1,054 | 3.05 | 310 | 6,539 | 18.93 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine -...-------- | 8 | ${ }^{47}$ | 0. 40 | 98 | ${ }^{937}$ | 8.41 | 149 | 1,966 | 17.65 |
| New Hampshire | 13 | 87 | 1.38 | 35 | 368 | 5.84 | 62 | 1,076 | 17.07 |
| Vermont.- | 3 | 6 | 0.13 | 43 | 315 | 7.04 | 5.5 | 643 | 14.38 |
| Massachusetit | 70 | 63.2 | 1.51 | 144 | 1,919 | 4. 58 | 272 | 8,148 | 19.47 |
| Rhode Island |  | 101 | 2.47 | 13 | 145 | 3.55 | 33 | 1,010 | 24.73 |
| Connecticat | 36 | 225 | 2.66 | 51 | 569 | 5.21 | 100 | 1,802 | 16.51 |
| New York | 167 | 1,547 | 2.11 | 168 | 1,601 | 2.18 | 372 | 10,894 | 14.83 |
| New Jersey | 44 | , 554 | 3.65 | 44 | . 787 | 5. 19 | 135 | 2, 237 | 18.06 |
| Pemnsylvania--.-.... | 110 | 1,586 | 3.71 | 88 | 1,485 | 3.47 | 407 | 8,61\% | 20.13 |
| South Atlantic Division: <br> Delaware |  | 41 | 3.03 |  |  |  | 16 | 507 | 37.42 |
| Maryland | 45 | 588 | 9.38 | 25 | 409 | 6.52 | 81 | 2,480 | 39.55 |
| District of Columbia. | 14 | 193 | 4.55 | 13 | 101 | 2.38 | 19 | 800 | 18.88 |
| Virginia | 58 | 472 | 5.95 | 20 | 242 | 3.05 | 89 | 1,765 | 22.26 |
| West Virginia | 13 | 102 | 3.49 | 12 | 166 | ¢. 68 | 31 | 437 | 14.97 |
| Northl Carolina | \% 0 | 141 | 1.90 | 22 | 204 | 2. 75 | 64 | $9 \% 8$ | 13.16 |
| South Carolina | 20 | 159 | 2.77 | 19 | 248 | 4.32 | 61 | 883 | 15.38 |
| Georgia | 52 | 493 | 5.15 | 35 | 413 | 4.31 | 109 | 1,961 | 20.50 |
| Florida | 10 | 55 | 3.14 | 11 | 59 | 3.37 | 21 | 250 | 14.28 |
| South Central Division: | 68 | 648 | 6. 75 | 49 | 457 | 4.76 | 101 | 1,625 |  |
| Teunessee | 58 | 479 | 4.33 | 45 | 497 | 4.49 | 148 | 1,941 | 17. 53 |
| Alabama. | 44 | 382 | 6.18 | 30 | 384 | 6.21 | 39 | 1,410 | 22.81 |
| Mississipp | 32 | 252 | 4.18 | $2 \pm$ | 271 | 4.49 | 128 | 2,131 | 35.35 |
| Louisiana | 17 | 107 | 3.06 | 19 | 218 | 5.95 | 51 | 1,013 | 28.97 |
| Texas | 117 | 1,235 | 6.23 | 55 | 858 | 4.38 | 285 | 5,498 | 27.71 |
| Arkansas | 13 | 171 | 3.72 | 10 | 99 | 2.15 | 47 | 811 | 17.64 |
| Oklahoma | 1 |  | 0.56 |  |  |  | 6 | 91 | 25.56 |
| Indian Territory | 2 | 7 | 1.30 | 1 | 4 | 0.74 | 8 | 64 | 11.90 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohio | 92 | 1,691 | 2.26 | 159 | 1,972 | 4.08 | 556 | 8,597 | 17.78 |
| Indiana | 43 | 540 | 1.89 | 28 | 417 | 1.46 | 283 | 5,237 | 18. 26 |
| Itlinois. | 43 | 484 | 1.18 | 110 | 1,503 | 3. 67 | 374 | 7,206 | 17.59 |
| Michigan | 23 | 215 | 0.72 | 45 | 563 | 1.88 | 289 | 5,028 | 16.7\% |
| Wisconsia | 16 | 169 | 0.77 | 11 | 123 | 0.56 | 238 | 3,553 | 16.09 |
| Minnesota | 10 | 78 | 0.55 | 29 | 381 | 2.69 | 115 | 2,427 | 17.14 |
| Iowa --- | 23 | 157 | 0. 50 | 100 | 1,355 | 4.34 | 347 | 6,011 | 19.25 |
| Missouri | 61 | 679 | 2.70 | 55 | 572 | 2.28 | 239 | 4,471 | 17.80 |
| North Dakot | $\stackrel{3}{2}$ | 10 | 0.81 | 3 | $2{ }^{2}$ | 2.19 | 24 | 186 | 15.09 |
| South Dak | 1 | 24 | 0.8\% | 10 | 78 | 2.67 | 47 | 610 | 20.86 |
| Nebraska | 21 | 230 | 1.45 | 22 | 332 | 2.09 | 236 | 3,877 | 21.40 |
| Kansas, | 12 | $1: 8$ | 0.81 | 37 | 462 | 2.92 | 197 | 3, 6t7 | 23.16 |
| Western Division: Montana |  | 28 | 1.65 | 4 | 69 | 4.06 |  |  |  |
| Wyoming | 2 | 16 | 4.48 |  |  |  | 6 | 60 | 16.81 |
| Colorado | 13 | 223 | 3.65 | 9 | 270 | 4.42 | 43 | 1,2\%5 | 20.06 |
| New Mexi | 3 | 12 | 3.47 | 2 | 12 | 3.47 | 5 | 33 | 9.51 |
| Arizona | 1 | 15 | 6.98 | 1 | 2 | 0.93 |  | 38 | 17.6\% |
| Utah. | 5 | 139 | 5.09 | 4 | 102 | 3.73 | 10 | 367 | 13.44 |
| Nevada | 1 | 1 | 0.23 | 2 | 10 | 2.32 | 8 | 239 | 55.45 |
| Idaho | 1 | 7 | 1.06 | 3 | 29 | 4.37 | 8 | 78 | 11. 76 |
| Washingto | 6 | 58 | 1.45 | 5 | 95 | 2.38 | 39 | 667 | 16.72 |
| Oregon | 14 | 113 | 4.17 | 15 | 145 | 5.35 | 27 | 593 | 21.87 |
| California | 71 | 512 | 3.54 | 33 | $3: 0$ | 2.69 | 144 | 2,974 | 19.44 |

Table 36.-Combined statistics of public high schools and private high schools and academies-secondary students in certain studies in 1999-1900.

| State or Territory. | Chemistry. |  |  | Physical geography. |  |  | Geology. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools reporting. | Num ver. | Per cent | Schools repor't. ing. | Number. | Per cent. | $\begin{aligned} & \text { Schools } \\ & \text { report- } \\ & \text { ing. } \end{aligned}$ | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | Pel cent. |
| United States | 2,886 | 50,431 | 8.00 | 6,180 | 144, 135 | 22.88 | 1, 254 | 25,300 | 4.02 |
| North Atlantic Division. | 091 | 18,452 | 8.78 | 1,573 | 87, 049 | 17.63 | 716 | 10,359 | 4.93 |
| South Atlantic Division.- | 2:9 | 3, 665 | 7.97 | 644 | 12,210 | \%. 86 | 101 | 1,279 | 2.71 |
| South Central Division -- | 313 | 4,413 | 7.15 | 779 | 19, 014 | 30.81 | 274 | 4,03\% | 6.54 |
| North Central Division. | 1,113 | 19,825 | 7.17 | 2,893 | 68, 719 | 24.86 | 58. | 8,081 | 2.92 |
| Western Division .......- | 2:0 | 3,9\%6 | 11.51 | 271 | 7,143 | $20.6 \%$ | 91 | 1,514 | $4.4 \%$ |
| North Atlantic Division: | 95 | 1,112 | 9.98 | 131 | 1,938 | 17.40 | 83 | 899 | \%. 09 |
| New Han | 45 | 685 | 10. $8 \tilde{\pi}$ | 58 | 1,858 | 13.61 | ${ }_{33}$ | 323 | 5.60 |
| Vermont. | 32 | 270 | 6.04 | 59 | 1,149 | 20. 69 | 35 | 337 | 7.31 |
| Massachuset | 233 | 5.153 | 12.34 | 181 | 3,450 | 8.24 | 138 | 1,764 | 4.21 |
| Phode Island | 17 | 4 23 | 10.36 | :3 | 492 | 12.05 | 11 | 86 | 2.11 |
| Connecticat | 57 | 995 | 9.12 | 89 | 2,225 | 20.38 | 41 | ${ }^{607}$ | 5.56 |
| New York | 289 | 4, 2 | 6. 42 | 475 | 12,7\%1 | 17.38 | 246 | 3,174 | 4.82 |
| New Jersey | 77 | 1,5\% | 10.40 | 124 | 3,888 | 21.65 | 31 | -660 | 4.35 |
| Fennsylvania | 146 | 8, 505 | S. 19 | 442 | 10,88 | 25.44 | 97 | 2,498 | 5.84 |
| South Atlantic Division: Delaware | 5 | 142 | 10.48 | 12 | 339 | ๕. 02 |  |  |  |
| Maryland. | 35 | 741 | 11. 82 | 20 | 1,327 | 21.16 | 13 | 117 | 1.87 |
| District of Coiumbia. | 14 | 368 | 8. 68 | 14 | 126 | 2.97 | 6 | 4.5 | 1. 06 |
| Virginia | 59 | 765 | 9.64 | 111 | 2,411 | 30.40 | 15 | $28 \%$ | 3.56 |
| West Virginia | 17 | 216 | 7.40 | ${ }^{42}$ | 810 | 28.77 | 9 | 101 | 3. 46 |
| North Carolina | 19 | $2 \% 6$ | 3.71 | 113 | 1,726 | 23.23 | 10. | 86 | 1.16 |
| South Caroli | 17 | 264 | 4.60 | 115 | 2,006 | 31. 38 | 12 | 120 | 2.09 |
| Georgia | 52 | 802 | 8.3 ri | 127 | 2, 85\% | 29. 66 | 30 | 474 | 4.95 |
| Florida | 11 | 191 | 10.91 | 38 | $58 \%$ | 33.24 | - | 54 | 3.08 |
| South Central Division: |  |  | 8.13 | 110 |  |  |  |  |  |
| Tennessee | 49 | 581 | 5.85 | 110 | 2,298 | 20.76 | 85 | 1,233 | 11. 14 |
| Alabama. | 35 | 464 | 7.51 | 66 | 1,526 | 24.68 | 31 | 488 | \%. 86 |
| Mississipp | $3 \pm$ | $2 \%$ | 4.51 | 97 | 2,251 | 37.34 | 2.5 | 32 | 5.34 |
| Louisiana | 30 | 541 | 15.47 | 51 | 1,473 | 42.12 | 19 | 149 | 4.26 |
| Texas | 95 | 1,546 | 7. 79 | 27.2 | 7,62\% | 38.42 | 59 | 1.195 | 6.02 |
| Arkansas | 13 | 146 | 3.18 | 59 | 1,392 | 30.28 | 10 | 197 | 4.29 |
| Oklahoma. | 3 | 46 | 13.98 | 6 | 157 | 44.10 | , | ( | 1.69 |
| Indian Territory | 2 | 36 | 6.69 | 8 | 104 | 19.33 | 1 | 8 | 1.49 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Indiana | 165 | 3,049 2,288 | ${ }_{7}^{6.37}$ | 616 329 | 12, 8144 | $\stackrel{26.63}{24.95}$ | 117 | 1,483 | 3. 6.18 |
| Illinois | 181 | 3,155 | 7.50 | 335 | 10,696 | 26.11 | 69 | 1,139 | 2.18 |
| Michigan | 186 | 3, 332 | 10.11 | 261 | 6,691 | 20.31 | 65 | 805 | 2.68 |
| Wisconsin | 45 | \%84 | 3. 55 | 243 | 7,011 | 31.74 | 20 | 375 | 1. $\% 0$ |
| Minnesota | 83 | 1,433 | 10.12 | 51 | 939 | 6.63 | 12 | 26 | 1. 45 |
| Iowa ... | 76 | 1.351 | 4.33 | $82 \%$ | $7.46 \%$ | 23.92 | 92 | 1,4:9 | 4.58 |
| Missouri | 108 | 1,983 | 7. 66 | 245 | 5,350 | 21.34 | 70 | 501 | 3. 39 |
| North Dakot | 3 | 43 | 3.49 | 19 | 299 | 19.38 | ${ }^{\circ}$ | 37 | 3. 00 |
| South Daj | 13 | 131 | 4.48 | 59 | 1,028 | 35. 16 | 13 | 132 | 4. 51 |
| Nebraska. | 80 | 1,557 | 9.80 | 225 | 5,258 | 32.96 | 21 | 35\% | 2.21 |
| Kansas. | 61 | 1,054 | 6.66 | 183 | 4, 530 | 29.25 | 54 | 631 | 4.36 |
| Western Division: Montana | 9 | 129 | \%.58 | 21 | $45 \%$ | 26.87 | 7 | 109 | 6. 41 |
| W yoming | 3 | 43 | 12.04 | 7 | 90 | 25. 21 |  |  |  |
| Colorado | 38 | 918 | 15.03 | 35 | 1,02\% | 16.82 | 23 | 542 | 8.88 |
| New Mexi | 2 | 10 | 2.89 | 10 | 169 | 48.84 | 4 | 33 | 9.54 |
| Arizona | 2 | 17 | 7.91 | 4 | 71 | 33.02 | 1 | 2 | 0.93 |
| Utah | 8 | 108 | 3.95 | 15 | 453 | 16.59 | \% | 175 | 6.41 |
| Nevada | 8 | 158 | 33.66 | 6 | $1 \% 6$ | 40.84 | 1 | 13 | 3.02 |
| Idaho | 3 | 37 | 5.58 | 10 | 250 | 37. 71 |  | 36 | 5. 43 |
| Washingt | 12 | 297 | 7.45 | 55 | 1,450 | 36. 35 | 11 | 198 | 4.96 |
| Oregon-.. | 16 | 308 | 11.36 | 31 | 918 | 33.85 | 12 | 138 | 5. 09 |
| California | 119 | 1,951 | 12.75 | 77 | 2,082 | 13.61 | 21 | 298 | 1.95 |

Tabee 3\%.-Combined statistics of public high schools and private high schools and academies-Secondary stidents in certain studies in 1899-1900.

| State or Territory. | Physiology. |  |  | Psychology. |  |  | Ehetoric. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Schools } \\ & \text { report- } \\ & \text { ing. } \end{aligned}$ | $\begin{aligned} & \text { Num- } \\ & \text { Ner. } \end{aligned}$ | Per cent. | Schoo's reporting | $\begin{aligned} & \text { Num- } \\ & \text { ber: } \end{aligned}$ | Per cent. | $\begin{gathered} \text { Schools } \\ \text { report- } \\ \text { ing. } \end{gathered}$ | $\begin{gathered} \text { Num- } \\ \text { Guer: } \end{gathered}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ |
| United States | 5, 833 | 139, 844 | 23.96 | 1,548 | 20,126 | 3.19 | 6,911 | 237,50 |  |
| North Atlantic Division South Atiantic Division Soath Central Division North Central Division Western Division ... | $\begin{array}{r} 1,488 \\ 586 \\ 901 \\ 9,740 \\ 178 \\ \hline \end{array}$ | $\begin{aligned} & 20,458 \\ & 14,687 \\ & 25,723 \\ & 74,48 \\ & 4,718 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 24.01 \\ & 2.73 \\ & 41.68 \\ & 4.68 \\ & 2.10 \\ & \hline 13.65 \\ & \hline \hline \end{aligned}$ | $\begin{aligned} & 310 \\ & 158 \\ & 351 \\ & \hline 64 \\ & 65 \\ & \hline \end{aligned}$ | $\begin{aligned} & 4,022 \\ & 1,022 \\ & 4.723 \\ & 4,723 \\ & 8,59 x \\ & 835 \\ & \hline \end{aligned}$ | 7.65 <br> 3.11 <br> 3.42 | $\begin{array}{r} 1,840 \\ 1,818 \\ 961 \\ 3,061 \\ 3,031 \\ \hline 331 \\ \hline \end{array}$ |  | $\begin{aligned} & 3 i \\ & \frac{34}{34} \\ & \frac{30}{30} \\ & \hline 06 \end{aligned}$ |
| North Atlantic Divisio Maine <br> New Hampshire Vermont Massachusetts Rhode Island Connecticut New Jersey | $\begin{gathered} 118 \\ 49 \\ 45 \\ 196 \\ 10 \\ 10 \\ 504 \\ 109 \\ 1388 \end{gathered}$ |  | $\begin{aligned} & 18.76 \\ & 10.17 \\ & 10.79 \\ & 10.79 \\ & 1.79 \\ & 17.87 \\ & 11.87 \\ & 30.74 \\ & 30.79 \\ & \hline 20.89 \end{aligned}$ | $\begin{aligned} & 25 \\ & 11 \\ & 28 \\ & 48 \\ & 7 \\ & 7 \\ & 20 \\ & 21 \\ & 21 \\ & 82 \end{aligned}$ | $\begin{gathered} 284 \\ 884 \\ 833 \\ 730 \\ 110 \\ 110 \\ 188 \\ 746 \\ 7488 \\ 1,397 \end{gathered}$ |  |  |  |  |
| South Atlantic Division <br> Delaware <br> District of Columbia <br> Virginia <br> West Virginia <br> North Carolina <br> South Carolina <br> Florida |  |  |  | $\begin{array}{r} 3 \\ 16 \\ 8 \\ 87 \\ 14 \\ 34 \\ 13 \\ 36 \\ 17 \end{array}$ |  | $\begin{aligned} & 1.92 \\ & 3.81 \\ & 1.58 \\ & 4.10 \\ & 4.10 \\ & 5.65 \\ & 4.36 \\ & 3.6 \pm \\ & .1 .17 \\ & 11.25 \\ & 1.20 \end{aligned}$ |  |  |  |
| South Central |  |  | $\begin{aligned} & 31.68 \\ & 3.51 \\ & 46.86 \\ & 49.88 \\ & 49.67 \\ & 44.07 \\ & 4599 \\ & 46.98 \\ & 21.91 \\ & 35.81 \\ & 35.85 \end{aligned}$ | $\begin{array}{r} 66 \\ 49 \\ 26 \\ 26 \\ 24 \\ 24 \\ 140 \\ 15 \\ 3 \\ 5 \end{array}$ |  |  | $\begin{gathered} 150 \\ 169 \\ 99 \\ 120 \\ 58 \\ 20 \\ 20 \\ 20 \\ 10 \\ 10 \end{gathered}$ |  |  |
| Kentucky |  |  |  |  |  |  |  |  |  |
| Alabama |  |  |  |  |  |  |  |  |  |
| Mississipp |  |  |  |  |  |  |  |  |  |
| Texas. |  |  |  |  |  |  |  |  |  |
| Arkansas |  |  |  |  |  |  |  |  |  |
| Indian Ter |  |  |  |  |  |  |  |  |  |
| Ohio | 625197304273239803072302450180186165 |  |  | 104104685057105$1 \%$$1 \%$1001026121757 |  | $\begin{aligned} & 3.88 \\ & 4.19 \\ & 1.85 \\ & .8 .83 \\ & 7.68 \\ & 1.99 \\ & 1.27 \\ & 5.14 \\ & 1.14 \\ & 1.05 \\ & 0.08 \\ & 4.68 \end{aligned}$ |  |  |  |
| Indiana |  |  |  |  |  |  |  |  |  |
| Milichois- |  |  |  |  |  |  |  |  |  |
| Wisconsin |  |  |  |  |  |  |  |  |  |
| Minneso |  |  |  |  |  |  |  |  |  |
| Mowsouri |  |  |  |  |  |  |  |  |  |
| Sorth Da |  |  |  |  |  |  |  |  |  |
| Nouth |  |  |  |  |  |  |  |  |  |
| Kansas:- |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { estern Divis } \\ & \text { Montana } \end{aligned}$ | 12993315588288981 |  |  |  | \% |  | $\begin{array}{r} 21 \\ 4 \\ 45 \\ 9 \\ 4 \\ 4 \\ 14 \\ 9 \\ 9 \\ 46 \\ 31 \\ 139 \end{array}$ | $\begin{array}{r} 671 \\ 93 \\ 9,747 \\ 94 \\ 91 \\ 64 \\ 693 \\ 193 \\ 130 \\ 933 \\ 931 \\ 8,688 \end{array}$ |  |
| Wroming |  |  |  |  |  |  |  |  |  |
| Now Mexi |  |  |  | 2 | 1 | 1.16 |  |  |  |
| Arizona |  |  |  | , | 45 |  |  |  |  |
| Nevada |  |  |  |  |  |  |  |  |  |
| Washing |  |  |  |  |  |  |  |  |  |
| Oregon |  |  |  |  |  |  |  |  |  |
| California |  |  |  | 19 | 135 | 0.88 |  |  |  |

Talle 38.-Combined statistics of public high schools and private high schools and aeademies-Secondary students in certain studies in 1899-1900.

| State or Territory. | English literature. |  |  | History. |  |  | Civics. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools reporting. | $\underset{\text { Der. }}{\text { Num- }}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Schoois reporting. | Num- | Per cent. | Schools reporting. | Number. | Per cent. |
| United State | 6, 700 | 259,493 | 41.19 | 6, 886 | 238,134 | 37.80 | 6,058 | 132, 863 | 21.09 |
| North Atlantic Division. | 1,848 | 95,011 | 45. 20 | 1,854 | 81,738 | 38.89 | 1,55\% | 34,592 | 16.46 |
| South Atlantic Dirision. |  | 19,509 | 41.32 | 701 | 21,615 | 45.73 | 438 | 8,064 | 17.08 |
| South Central Division - | 804 | 20,182 | 3\%.70 | 869 | 24,596 | 39.85 | 755 | 17,614 | 28.54 |
| North Central Division. | 3,049 | 103, 742 | 37.53 | 3,129 | 93, 191 | 33. 72 | 3, 008 | 65.,485 | 23.69 |
| Western Division ....... | 362 | 21,049 | 60.92 | 333 | 16,994 | 49.18 | 340 | 7, 108 | 20.57 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine -.............-- | 159 | 4,411 | 39. 60 | 159 | 4,109 | 35. 89 | 143 | 1, 002 | 17.88 |
| New Hampshire..... | 78 | 2,545 | 40.37 | 79 | 2,268 | 35. 38 | 51 | 591 | 9.38 |
| Vermont...........-- | ${ }^{65}$ | 1,269 | 28.37 | 66 | 1,53\% | 34.36 | 62 | 1,040 | 23.25 |
| Massachusetts .------ | 320 | 29, 871 | ${ }^{71} .37$ | 311 | 21,329 | 50.96 | 225 | 4,859 | 11.61 |
| Rhode Island .-.-...-- | 119 | 2,740 | 67.09 | 128 | 1,79\% | 43.88 | 2 | $1{ }^{4} 298$ | 9.99 |
| Connecticut -......... | 479 | 20,924 | -28.41 | 509 | 23,164 | ${ }^{41.53}$ | 46 | 11,498 | 11.69 |
| New Jersey | 150 | 7, 808 | 51.51 | 156 | 6,845 | 45.15 | 105 | 2, 234 | 15. 22 |
| Pennsylvania | 453 | 18,532 | 43.32 | 414 | 15, 781 | 33.89 | 404 | 10, 304 | 24.30 |
| Delaware -.....-....-. | 15 | 379 3,898 | 27.97 6.17 | ${ }_{82}$ | 485 3,908 | 35.79 62.23 | 12 | 1,579 | $\stackrel{20.59}{25}$ |
| District of Columbia. | $\stackrel{23}{ }$ | 3,576 | 8.38 | 24 | 2, 233 | 55. 63 | 12 | 150 | 3.54 |
| Virginia | 120 | 2,640 | 33.28 | 125 | 3,817 | 48.12 | 68 | 1,205 | 15.19 |
| West Virginia | 38 | 929 | 31.82 | 44 | 1,150 | 40.75 | 41 | 897 | 30. 72 |
| North Carolina | 91 | 1,878 | 25.28 | 113 | 2,297 | 30.92 | 80 | 1,473 | 19.83 |
| South Carolina | 102 | 2,135 | 37. 23 | 119 | 2,745 | 47.85 | 61 | 865 | 15.08 |
| Georgia. | 132 | 3, 550 | 37.05 | 145 | 4,195 | 43. 78 | 69 | 1,202 | 12. 54 |
| Florida -- | 28 | 5*3 | 29.87 | 34 | 691 | 37.18 | 33 | 415 | 23.70 |
| South Central Division: | 134 | 3. 296 | 34.33 | 130 | 4,026 | 41.93 | 126 | 2,562 | \%6. 68 |
| Tennesse | 123 | 2,831 | 2.57 | 132 | 3,307 | 23. 87 | 115 | 2,216 | :0.02 |
| Alabama | 80 | 2,445 | 39.55 | 84 | 1,988 | 33. 16 | 48 | 1,170 | 18.93 |
| Mississippi | 106 | 1,045 | 32.59 | 107 | 2,267 | 3\%. 60 | 111 | 2,464 | 40.87 |
| Louisiana | 57 | 1,632 | 46.67 | 62 | 2,171 | 6\%. 08 | 35 | $85 \%$ | 24. 36 |
| Texas. | 220 | 6,194 | 31.22 | 273 | 9,128 | 46.01 | 251 | 6,632 | 33. 43 |
| Arkansas | 62 | 1, 716 | 37.33 | 63 | 1,394 | 30.82 | 53 | 1,409 | 30. 65 |
| Oklahoma. | 4 | 85 | 9.83 | , | 89 | 2\%.00 | 7 | $18 \%$ | 51.12 |
| Indian Territory | 8 | 68 | 12. 64 | 12 | 226 | 48.01 | 9 | 127 | 23.61 |
| North Central Division: <br> Ohio | $5 \%$ | 17,800 | 86.82 | 589 | 14,242 | 29.46 | 641 | 11,881 | 21.53 |
| Indiana | 371 | 14, 581 | 50.93 | 369 | 11,126 | 38.86 | 299 | 6,273 | 21.91 |
| Illinois | 386 | 22, 1034 | 53. 78 | 381 | 13, 551 | 33.56 | 330 | 7,335 | 17.90 |
| Michigan | 280 | 6, 720 | 22.41 | 302 | 11,091 | 36.99 | 280 | 6,008 | 20.03 |
| Wisconsin | 226 | 6,257 | 28. 83 | 240 | 6, 700 | 30.56 | 226 | 5,006 | 22.66 |
| Minnesota | 121 | 3, 766 | $\because 6.60$ | 133 | 5, 924 | 41.85 | 88 | 1,999 | 14.12 |
| Iowa. | 333 | 9,876 | 31.63 | 352 | 9,645 | 30.89 | 320 | 8,455 | 27.08 |
| Missouri | 279 | 8,153 | 32. 46 | 281 | 9,076 | 36.14 | 252 | 6,208 | 24.72 |
| North Dakota | 28 | 675 | 21. ${ }^{24}$ | 23 | 365 | 29.60 | 24 | 334 | 27.09 |
| South Dakota | 55 | 878 | 30.03 | 55 | 959 | $3{ }^{3} .80$ | 64 | 1,149 | 39.30 |
| Nebraska | 201 | 7,386 | 46.48 | 211 | 5,878 | 33.99 | $2 \times 1$ | 5,2\%3 | 32. 87 |
| Kansas | 19: | 5,616 | 32.47 | 193 | $4.38 \pm$ | 27.69 | 206 | 5,635 | 35.99 |
| Western Divjsion: |  |  |  |  |  |  |  |  |  |
| Montana. | ${ }^{2}$ | $\begin{aligned} & 643 \\ & 211 \end{aligned}$ | 37.80 59.10 | 15 | $\begin{aligned} & 4533 \\ & 136 \end{aligned}$ | $\begin{aligned} & 26.63 \\ & 35.10 \end{aligned}$ | 20 4 4 | 631 | 18.21 |
| Colorado | 49 | 4,137 | 67. 74 | 45 | 4,012 | 65.70 | 35 | 1,009 | 16.5: |
| New Mexic | 6 | 97 | 23.03 | 8 | 108 | 31.21 | 5 | 75 | 21. 48 |
| Arizona | 4 | 110 | 51.16 | 4 | 81 | 37.67 | 4 | 75 | 34.88 |
| Utah | 15 | 6336 | 23. 29 | 11 | 857 | 31.38 | 12 | 300 | 10.98 |
| Nevada | 9 | $32 \%$ | \% 8.71 | 7 | 308 | 71.46 | 8 | 150 | 34.80 |
| Idaho | 11 | 239 | 35.05 | 10 | 18: | 27.45 | 8 | 284 | 42. 81 |
| Washing | 49 | 1,310 | 32. 84 | 33 | 1,199 | 30.03 | 38 | 896 | 22.46 |
| Oregon- | 28 | 849 | 31.31 | 33 161 | 1,249 | $46.05$ | 29 $13 i$ | - 929 | 34.26 |
| Calitornia. | 164 | 12,495 | 81.67 | 161 | 8,409 | 54.96 | 137 | 2,794 | 18.26 |

Table 39.-Distribution of secondary students in public and private institutions of all classes reporting to the United States Bureau of Education for the scholastic year 1899-1900. (See also Table 40.)

| State or Territory. | Total public and private secondary students. |  |  | In public institutions. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | In public high schools. |  |  | In preparatory departments of public universities and colleges. |  |  | Secondary students in pubiic normal schools. |  |  | Total public secondary students. |  |  |
|  | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. |
| United States | 317,209 | 402,632 | 719,241 | 216,207 | 303, 044 | 519,251 | 6,132 | 2,087 | 8,219 | 1,049 | 1,906 | 2,955 | 223,388 | 307,037 | 530,425 |
| North Atlantic Division | 104,423 | 121, 860 | 226,283 | 73, 233 | 96,072 | 169,405 | 869 | 14 | 883 | 330 | 812 | 1,17\% | 74,532 |  | 171,450 |
| South Atlantic Division | 25,541 | 31,494 | 57,035 | 10,593 | 16,460 | 27,013 | 905 | 236 | 1,141 | 245 | 349 | 1, 554 | 11, 703 | 17,005 | 28,708 |
| South Central Division. | 34,685 | 43,943 | 78,628 | 16,080 | 23, 289 | 39, 669 | 1,194 | 199 | 1,393 | 85 | 81 | 166 | 17, 359 | 23,869 | 41,228 |
| North Central Division | 134,508 | 180,237 | 314, 745 | 104,880 | 149,836 | 251,816 | 1,734 | 658 | 2,392 | 271 | $5 \% 7$ | 798 | 106,985 | 151,021 | 258,006 |
| Western Division | 18,05\% | 24, 498 | 42,550 | 11,261 | 17,087 | 25,348 | 1,430 | 950 | 2,410 | 118 | 147 | 265 | 12, 809 | 18,214 | 31,023 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine...... | 4, 896 | 6,535 | 11, 431 | 3,828 | 4,921 | 8,749 |  |  |  | 26 | 29 | 55 | 3,854 | 4,950 | 8,804 |
| New Hampshir | 3,338 1,978 | 3,109 $\sim$ 2,495 | 6,447 4,473 | 1,602 | \% $\because 102$ | 3, 704 | 15 |  | 15 | 38 | 49 | 87 | 1,655 | 2,151 | 3,806 |
| Massachuset | 19,502 | 23,189 | 42,691 | 15, 718 | 20,226 | 30,934 |  |  |  |  |  |  | 15,718 | - | $\begin{array}{r}3,438 \\ 354 \\ \hline 194\end{array}$ |
| Rhode Island | 2,40.7 | 2,557 | 4,:66 | 1,476 | 1,974 | 3,450 | 20 | 11 | 31 |  | 32 | 32 | 10,18 1,498 | 2,017 | $\stackrel{3}{3,513}$ |
| Connecticut | 4,941 | 5,390 | 10,931 | 3,519 | 4,588 | 8, 107 | 12 | 3 | 15 |  |  |  | 3,531 | 4,591 | 8,122 |
| New York | 40,012 | 42, 645 | 82, 657 | 29,019 | 33, 317 | 62, 303 | 76 |  | 76 | 179 | 311 | 520 | 29,974 | 33, 688 | 63,652 |
| New Jersey | 6,769 20,582 | 9,045 | 15, $85 \frac{1}{4}$ | 4, $4.25 \%$ | 7,008 | 11,230 |  |  |  | ${ }^{67}$ | 111 | 178 | 4,319 | 7,119 | 11,438 |
| South Atlantic Division: | 20,588 | 20,205 | 46,837 | 12,437 | 19,950 | 32,387 | 46 |  | 46 | 20 | 280 | 300 | 12,503 | 20,230 | 32, 733 |
| Delaware............ | 610 | 811 | 1,421 | 402 | 650 | 1,05\% | 16 | 15 | 31 |  |  |  | 418 | 665 | 1,083 |
| Maryland | 3,364 | 3,858 | 7,222 |  | 2,236 | 3,956 | 30 |  | 30 |  |  |  | 1,750 | 2,234 | 3,986 |
| District of | $\stackrel{2,141}{4,127}$ | 2,689 | 4,830 8,201 | 1,313 | 2,118 | 3,431 4,331 | 145 | ${ }_{13}^{26}$ | 171 81 81 |  |  |  | 1,458 | 2, 144 | $3,60 \%$ 4.459 |
| West Virginia | 4, 1,503 | 5,094 | 9,223 3,592 | 1,596 | 2,734 | 4,230 1,955 | 18 | 13 <br> 34 | 2482 | 130 | 31 146 | 276 | 1,681 | 2,788 1,470 | 4,459 2,473 |
| North Carolina | 4,993 | 4,578 | 9,570 | 405 | 1,538 | ${ }^{1} 94$ | 78 | 62 | 140 |  |  |  | , 483 | , 600 | 1,083 |
| South Carolin | 3,316 | 4,045 | 7,361 | 1,693 | 2,305 | 3,908 | 136 |  | 136 |  |  |  | 1,829 | 2,305 | 4,134 |
| Georgia | 4, 535 | 6 6,695 | 11,250 | 2,202 | 3,443 | 5,345 | 194 | 12 | 206 |  | 70 | 70 | 2,396 | 3,725 | 6,121 |
| Florida -...- | 933 | 1,635 | 2,568 | 557 | 916 | 1,503 | 80 | 74 | 154 | 48 | 62 | 110 | 685 | 1,082 | 1,767 |
| Kentucky-.... | 5,532 | 7,426 | 12,958 |  |  |  | 95 | 7 | 102 | 15 | 20 | 35 | 2,422 | 3,232 | 5,654 |
| Tennessee | 7,189 | 8,508 | 15, 697 | 2,169 | 3, 253 | 5,42\% |  |  |  |  |  |  | 2,169 | 3,253 | 5,$42 ;$ |
| Alabama | 3,107 | 4,171 | 7,278 | 1,478 | 2,339 | 3,818 | 38 |  | 38 | 16 | 9 | 25 | 1,532 | 2,318 | 3;880 |
| Mississippi | 3,301 | 4, 304 | 7,605 | 1,618 | 2,434 | 4,05\% | 44. | 1 | 443 | 18 | 30 | 48 | 2,0\%8 | 2,465 | 4,543 |
| Lexasiana | 1,976 9,810 | 2,834 12,613 | 4,810 22,423 | 814 6.648 | 1,401 | 2,215 14,389 | 137 |  | 137 | 34 | 20 | 54 | 951 6,112 | 1,401 | $2,35 \%$ 14,983 |
| Arkansas | 2,783 | 3,205 | 5,978 | 1,371 | 1,853 | 3, 2,24 | 260 | 104 | 364 |  |  |  | 1,631 | 1,957 | 3,588 |
| Oklahoma Indian Territor | 577 | 489 | 1,068 | 117 | 219 | 336 | 22.2 | 87 | 309 | 2 | 2 | 4 | 341 | 308 | 649 |
| Indian Territory | 420 | 393 | 813 | 123 | $3 \pm$ | 157 |  |  |  |  |  |  | 123 | 34 | 157 |

Table 39．－Distribution of secondary stuclents in public and private institutions of all classes

| State or Territory． | Total publicand private secondary students． |  |  | In public institutions． |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | In public high schools． |  |  | In prepratory depart－ ments of public uni－ versitios and colleges． |  |  | Secondary students in public normal schools． |  |  | Total public secondarystudents． |  |  |
|  | Male． | Female． | Total． | Male． | Female． | Total． | Male． | Female． | Total． | Male． | Female | Total． | Male． | Female． | Total |
| North Contral Division： |  |  |  |  |  |  |  |  |  | 43 | 50 | 03 |  |  |  |
| Indiana．．．． | 13， 193 | 17，693 | 31，291 | 11，185 | 15， 2.31 | 4， 0,15 | 24 | 11. | 36. | 45 | 5 | 33 | 11， 18.4 | 15， 2,31 | 26， 410 |
| Millinois．．． | 13， 1834 |  | 478， | 14，670 | \％， 7676 | 年， 3141 | 163 | 61 | 237 | 13 | 85 | 176 | 14， 214 | 20， 3 | 37， 819 |
| Wisconsin | 10，3107 | 13，123 | 23， 3031 | 8，\％m | 11， 376 | 20， 6 |  |  |  | 1：2 | 4 | 54 | 8，762 | 11，918 | 20，684） |
| Minnesota | （6，921 | 8，734 | 15． $13 \%$ | 5， 020 | 7，\％ | 12，311 | 4019 | 80 | 489 | $\ldots$ | － | ， | 5，420 | 7，370 | 3：2，790 |
| Iowa－uri | 14， 72.6 | 20， 218161 | － 35.50 .5 | －11，773 | 17， 1 | 洮，（1） | 150） | 36 | 186 | 85 | 83 | 167 |  | 17， | \％ 21.375 |
| North Dakota | 12， 72 | ， 984 | 1，759 | 4，42 | ${ }^{6}$ 633 | 1，136 | 15 | （i8） | 293 |  |  |  | 507 | ${ }_{7} 7.56$ | 2， 2,38 |
| South Dak | 1，730 | 2，2n1 | ， 2,931 | 1，111 | 1，inlf | 2， 2178 | 34 | 163 | 417 | 2 | 18 | 20 | 1，357 | 1，6887 | 3，044 |
| Nebraska | 8， 3,18 | 11，905 | － |  | 9， 9,043 | 14，913 | 103 | \％ | （16） | 38 | 200 | 238 | ${ }_{6}^{6,031}$ | 9，332 | 15,363 |
| Western Division： |  |  |  |  |  |  |  |  |  | 17 | 1 | 38 |  |  |  |
| Wontana－－．．．． |  | 1，9319819 | 1，981 | ${ }^{64 \%}$ | $\begin{aligned} & 993 \\ & 2002 \end{aligned}$ | 1，6， 635 | ${ }_{6}^{61}$ | ${ }_{47}^{84}$ | ${ }_{115}^{15}$ | 17 |  | 38 |  | 1，098 | ${ }^{1,818}$ |
| Colorado．．． | 2,92 | 4，107 | 7，0：3 | 2，337 | 3，573 | 5，919 | 㳽 | 235 | 463 |  |  |  | 2，565 | 3，8198 | 0，373 |
| New Mexico | 339 | ${ }^{499}$ | \％\％ | 108 | 11.3 | 172 | 1417 | 167 13 13 | 3101 | 15 | 16 | $\begin{array}{r}100 \\ 31 \\ \hline\end{array}$ | 1 | 380 | （entis |
| Utah | 0,033 | 2，367 | 4，4（1） | 491 | 6.4 | 1，115 | 389 | 153 | 542 |  |  |  | 880 | 777 | 1，657 |
| Nevada | \％31 | \％，3\％ | \％88 | ${ }^{16,46}$ | ？${ }^{2}$ | 431 | ${ }^{67}$ | 8 | 137 |  |  |  | 331 |  | ditic |
| Washington | 2，038 | 2，888 | 4，\％ 2 | 1，32063 | 2，137 | 3，463 | 2 | 120 | 325 |  |  | 11 | 1，565 | 2，264 | 3，829 |
| Oregon．．．． | 1，574 | 2，170 | 3．744 |  | 1，173 | ${ }^{1,976}$ | 83 | 34 | 117 | 25 | 23） | 45 | 851 | 1，$, 2,27$ | 2，078 |
| California | 7，193 | 9，981 | 17，173 | 5， | c， $3 \times$ | 12，620 |  |  |  | ． |  | 40 |  | 6，623 | 12，660 |

TABLE 40.-Distribution of secondary students in public and private institutions of all classes reporting to the United Síates Bureau of In private institutions.

| State or Territory. | In private institutions. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | In private high schools. |  |  | In preparatory departinents of private universities and colleges. |  |  | In preparatory depart. ments of colleges for women. | Secondary students in private normal schools. |  |  | Secondary students in manual-training schools. |  |  | Total private secondary students. |  |  |
|  | Male. | Female. | Total. | Male. | Female. | Total. |  | Male. | Female. | Total. | Male. | Femalo. | Total. | Male. | Female. | Total. |
| United States | 55, 734 | 55,003 | 110, 797 | 25,68\% | 19,384. | 48,066 | 13.81\% | 3,817 | 2,798 | 6,615 | 5,588 | 3,933 | 9,521 | 93, 821 | 94,995 | 188,816 |
| North Atlantic Division | 21,433 | 19,343 | 40, 776 | 5,2\%2 | 2,263 | 7,535 | 1,163 | 91 | 127 | 221 | 3,092 | 2,036 | 5,128 | 29,891 | 24,932 | 54,823 |
| South Atlantic Division | 10,171 | 10,431 | 20, 203 | 3,088 | \%, 660 | 5,648 | 1,345 | 286 | 317 | 543 | :93 | 246 | 539 | 13,838 | 14,489 | 23,3,37 |
| South Central Division. | 11,298 | 10, 743 | 22,041 | 5,148 | 5,312 | 10, 460 | 3, 415 | 608 | 413 | 1,021 | 272 | 191 | 463 | 17,326 | 20,074 | 37, 400 |
| North Contral Division | 10,015 | 11,539 | 21,574 | 13,230 | 7,880 | 21,110 | 6,705 | 2,8\%6 | 1,947 | 4,773 | 1,452 | 1,125 | 2,577 | 27,523 | 29,216 | 56, 739 |
| Western Division....... | 2,817 | 3,387 | 6,204 | 1,944 | 1,369 | 3,313 | 1,189 | 3 | 4 | 7 | 479 | 335 | 814 | 5,243 | 6, 284 | 11,5\%\% |
| North Atlantic Division: | 1.040 | 1,347 | 2,389 |  | 238 | 238 |  |  |  |  |  |  |  | 1,042 | 1,585 | 2,627 |
| New Hampshir | 1,642 | 958 | 2,600 | 41 |  | 41 |  |  |  |  |  |  |  | 1,683 | 1,958 | 2,641 |
| Vermont ... | 496 | 539 | 1,035 |  |  |  |  |  |  |  |  |  |  | 496 | 539 | 1,035 |
| Massachusetts | 3,034 | 2,87\% | 5,911 | 447 | 34 | 481 | 22 |  | 22 | 22 | 303 | 8 | 311 | 3,784 | 2,963 | 6,747 |
| Rhode Island | 355 | 269 | 634 |  |  |  |  |  |  |  | 544 | 271 | 815 | 909 | 540 | 1,449 |
| Connecticut | 1,410 | 1,399 | 2, 809 |  |  |  |  |  |  |  |  |  |  | 1,410 | 1,399 | 2, 269 |
| New York. | 5,250 | 5,855 | 11,105 0,398 | 2, 8136 | 929 78 | 3,755 | 470 45 |  |  |  | 1,962 | 1,703 | 3,665 88 | 10,038 2,450 | 8,957 1,966 | $18,99 \%$ 4,416 |
| New Jersey- | 2, 6,085 | 1,789 4,310 | 13, | 1,645 | 984 | $\begin{aligned} & 3,391 \\ & 2,629 \end{aligned}$ | 6\%9 | 94 | 105 | 199 | 25\% |  | 250 | $\stackrel{2,450}{8,079}$ | 1,906 | 4, 4 , 104 |
| South Atlantic Division: | $15 \%$ | 146 | 3013 |  |  |  |  |  |  |  | 35 |  | 35 | 192 | 146 | 338 |
| Maryland | 1,038 | 1,2\%6 | 2,314 | 546 | 258 | 834 | 88 |  |  |  |  |  |  | 1,614 | 1,6\% | 3,236 |
| District of Columbia | 26\% | 555 | 807 | 421 |  | 421 |  |  |  |  |  |  |  | 683 | 545 | 1,2¥8 |
| Virginia | 1,949 | 1,6.3 | 3,60 | 284 | 392 |  | 97 | 98 | 109 | 207 | 115 | 65 | 180 | 2, 446 | 2,316 | 4,762 |
| West Virginia | 455 | 510 | 955 | 35 | 79 | 114 | 20 | 10 | 10 | 20 |  |  |  | 500 | 619 | 1,119 |
| North Carolina | 3,690 | 2, 797 | 6,787 | 656 | $64 \%$ | 1,998 | 338 | 45 | 70 | 115 | 118 | 131 | 249 | 4,509 | 3,978 <br> 1 <br> 10 | 8,487 |
| South Carolina | 1,6:1 | 2,116 | 13,739 | 438 | 508 | 1,089 | 303 | 76 | 49 | 125 | 25 | 50 | 75 | 2,159 | 2,9\% | 5,129 |
| Florida | , 64 | 184 | 248 | $12 \%$ | 150 | 277 | 150 | 57 | (\%) | 126 |  |  |  | 248 | 553 | 801 |
| South Central Division: | 2,05 | 2,040 | 4,085 | 1,011 | 1,234 | 2,245 | 834 | 74 | 66 | 140 |  |  |  | 3.110 | 4,194 | 7,304 |
| Tennessee | 2,973 | 2,676 | 5, 5149 | 1,645 | 1,346 | 2,491 | 981 | 382 | 20 | $6{ }^{6} 14$ | 20 | 30 | 50 | 5,120 | 5,279 | 10,275 |
| Alabama | 1,209 | 1,136 | 2,365 | 323 | 391 | 714 | 235 | \% | 4.1 | 48 | 16 |  | 16 | 1,575 | 1,8:23 | 3,398 |
| Mississippi | 988 | 989 | 1,977 | 195 | 202 | 897 | 134 | 40 | 14 | 54 |  |  |  | 1.2*3 | 1, 833 | 3, 10\% |
| Louisiana | 646 | (i3) 6 | 1,240 | 1879 | 419 | ${ }^{7} 9.98$ | 378 |  |  |  |  |  |  | 1,025 | $\frac{1}{1,433}$ | $\stackrel{\sim}{\sim}$ |
| Arkansas | 2,491 | 2,415 | 4, 1,373 | 1,169 | 824 | 1,983 | 481 261 | 870 | 24 | ${ }_{114}^{61}$ |  |  |  | 3,698 | 1,248 | :2,340 |

Table 40.-Distribution of scondary studenis in public and private institutions of all classes reporting to the United States Bureau of


TABLE 41.-Numoer of secondary students to each 1,000 inhabitanis in each State in 1900; also number of students in higher education to each 1,000 of population.

|  |  |  |  |
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Table 42.--Statistics of public high schools in the United States for the scholastic year 1999-1900.


Table 42—Statistics of public high schools in the United States for the scholastic year 1893-1300—Continued.




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| 150 | Etna Mills |  |
| 151 | Eureka | High Sch |
| 152 | Fallbrool | Union High School .-.... |
| 153 | Fresno | High School |
| 154 | Fullerto | Union Migh Schoo |
| 155 | Gilroy | High School |
| 156 | Grass Valley |  |
| $15 \%$ | Gridley | Union High Scho |
| 158 | Fanford |  |
| 159 | Haywards |  |
| 160 | Healdsbur | High School |
| 161 | Hemet | Union High School |
| 16\% | Hollister | High School |
| 163 | Julian | Cuyamaca Union High school |
| 164 | Livermore | Alameda County Union High School No. 1. |
| 165 | Lodi. | High School ............ |
| 166 | I.ompoc. | Union High Sc |
| 167 | Long Beach | High School |
| 163 | Los Angele |  |
| 169 | Los Banos | West Side Union High School. |
| 170 | Los Gatos | High School |
| 171 | Madera | do |
| 172 | Marysville | do |
| 173 | Mendocil | do |
| 174 | Merced | do |
| 175 | Monrovia | do |
| 176 | Napa | do |
| 177 | National City | do |
| 178 | Nevada City | - |
| 179 | Oakdalo. | Union Higl |
| 180 | Oakland | High School |
| 181 | Orland. | Union High Scho |
| $18 \%$ | Oroville |  |
| 183 | Pasadena | Wilson High Scho |
| 185 | Paso Robles | High School |
| 185 | Perris. | Union High Scho |
| 186 | Petaluma | High School |
| 157 | Placervill | Union High School (dist. No.1). |
| 188 | Pomona | High School |
| 189 | Ramona |  |
| 190 | Red Bluff | Union High Schoo |
| 191 | Redaing - | Shasta County Hi |
| 192 | Redlands | Union High School.- |

Table 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900—Continued.


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Table 42．－Statistics of public high schoois in the United States for the scholasĩic year 1899－1900－Continued．

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Table 42.—Statistics of public high schools in the United States for the seholastic year 1899-1900—Continued.





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| 405 | Amason | n Hiph | Miss Mary Lightfoot |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40 |  | Hig | Normand. milier |  |  |  | 16 | \% |  |  |  |  |  |  |  |  |  | 20. | ${ }_{15}^{3}$ |  |  | 280 |  |
| 408 | Athens. | st Board High | Rev.J.A. Bray, A. | Dept | 1 |  | 3 | 34 | 0 |  |  |  |  |  | 1 |  |  | 1 | 6 |  |  | 300 |  |
| 403 | Atlanta | Girls' High Scl | SNettie C.Sergeant | Dept |  | $1 \cdot$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 411 | Augusta Austell.- | High School |  | Dept |  |  |  |  |  |  | 2 |  |  |  | 0 |  |  | 0 | 2 |  |  | (600 | ${ }_{3,100}^{12,60}$ |
|  | Baldwinsvi | -as | Sse Rosa V.cald | Ind |  |  |  | ${ }^{11}$ | ${ }_{45}^{4}{ }_{40}$ |  |  |  |  |  |  |  |  |  |  |  |  |  | - |
| $\begin{aligned} & 149 \\ & \hline 14 \\ & 415 \end{aligned}$ | Bethlehe | Hiph Sei | John H. Breediove | Dept |  | 0 | 1 | ${ }_{18}^{2}$ | ${ }_{0}^{49}$ |  |  |  |  |  | ${ }_{2}^{2}$ |  | ${ }^{\circ}$ | ${ }_{2}$ | 1 |  |  |  | ${ }^{400}$ |
|  | Brooks Sta | Hipl is |  | Dept |  | 0 | . | - | 42 |  | $\frac{1}{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 417 \\ & \hline 18 \\ & \hline 18 \end{aligned}$ | Branswick | Glynn High S | Mirs. M. L. Parker | Dept |  | ${ }_{8}^{3}$ | 2 | \% |  |  |  | 0 |  |  | 0 |  |  |  |  |  | -.- | 300 |  |
|  | Byron ${ }^{\text {che }}$ |  | J.G. Cline | Ind |  | ${ }_{0}^{0}$ |  |  | 12 | 30 | ${ }_{8}^{2}$ | $\begin{aligned} & 6 \\ & 0 \end{aligned}$ | 1 | 0 |  |  |  |  |  |  |  |  |  |
| 4 | Cartersville | do | Miss Lena Ford | Dept |  | 2 | 38 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ${ }_{150} 5$ |  |
|  | Cedartown |  | Henry L | Dept |  | 0 |  |  | 0 | 9 | 6 | ${ }^{10}$ | 2 | 5 | 3 |  |  | 2 | 5 |  |  |  |  |
|  | Clarkston | do.* | Miss Bessie Tuggie | Ind |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 45 | 5(1) |
|  | Coleman |  | E. W. Chil | Dept | 1 | 0 |  |  | ${ }_{0}^{15}$ | ${ }^{35}$ | 2 | 1 | 1 | 0 |  | 1 |  | 1 | 0 |  |  |  |  |
| $\begin{aligned} & \frac{1928}{427} \\ & \hline 27 \end{aligned}$ | Concord -.. | Midide Georgia Insti- | B | Dept. | 1 | 0 | \% 17 | 175 | 50 | 41 |  |  |  |  |  |  |  |  |  |  |  |  | 1,300 |
| $\frac{488}{488}$ | Cordele | Hight Sebo | res T.Saur |  |  |  |  |  |  |  | 2 | 5 | 2 |  |  |  |  |  |  |  |  |  |  |
|  | Coyngton | Institute | dight |  |  | ${ }_{10} 1$ | 19 | 10 | 26.27 | 27 | 0 | 2 |  |  |  |  | 20 | 0 | 2 |  |  |  | 8, 0 co |
|  | Culverton |  |  |  |  | $1$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | Dunn | Pleacemy Plajiley Acad- | J.T.Leammon.---- | Ind | 2 | 1. | 23 | ${ }_{28}^{10}$ | ${ }_{0} 8$ | ${ }_{0}^{48}$ | 7 | 5 | 10 | 8 |  |  |  |  |  |  |  |  | 1,200 |
|  | Eatonton |  | Puce |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  | 115 |  |
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Table 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.










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T'Able 42.-Statistics of public high schools in the United Siates for the scholastic year 1890-1900—Continued.








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TABLE 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900—Continued.


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Tarle 42.-Statistics of public high schools in the Unitcd States for the scholastic year 1802-1900—Continued.









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TABLE 42.-Statistics of puolic high schools in the United States for the scholastic year 1S09-1900-Continued.

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Table 42.—Statistics of public high schools in the United States for the scholastic year 1S90-1900-Continued.





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Table 42.-Statistics of public high schools in the United Slates for the scholastic year 1892-1900-Continued.


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Table 49.-Statistics of public high schools in the United States for the scholastic year 1890-1900-Continued.















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Table 42.-Statistics of public high schools in the United States for the scholastic year 1S99-1900-Continued.



[^123]TABLE 42.-Statistics of mublic high schools in the Tnited States for the scholastic year 1899-1900-Continued.



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W.C. Pidgeon
W.L. Martin


 N. Hamilion
 H. C. Coe
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Miss Lizzie Marley
Milton L. Kephart. W.P. Johnson年 H. C. Richardson W. T. Daviason -...

 A. R. Gardine
L.C. Bryan
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[^124]Table 42.-Statistics of public high schools in the United Siates for the scholastic year 1899-1900-montinued.


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TABLE 42.-Statistics of public high schools in the United States for the scholrstic year 1899-1900-Continued.







Table 42.-Statistics of public high schools in the United States for the scholasiic year 1899-1900-Continued.



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Table 42.—Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.


Table 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.



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[^125]$\qquad$ W．A．Le Rosen－．．．．． D．B．Showalter ．．．．．．．．．．．． Frank W．Gregory－ Mrs．A．L．Luasher（act－
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High School（colored） Morehouse High School． Central High School ．．．． Female Institute ．．．．．．．． Ascension Academy＊．－．

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Table 42.-Statistics of public high schools in the United States for the scholastic year 1899-1300-Continued.





Table 42.-Statisties of pubite Wigh schools in the United States for the schoiastic year 1890-1900-Continued.


TABLE 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.


Table 42.—Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.


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Table 42.-Staitistics of public high schools in the United States for the scholastic year 1899-1900—Continued.


Table 42.—Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.


TABLE 42.-Statisties of public high schools in the United States for the scholastic year 1899-1900—Continued.


TABLE 42．—Statistics of mulic high schools in the United States for the scholastic year 1899－1900—Continued．

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| 242＂） | Douglas． | Union School | Geo．C．Nevins | Dept．． | 1 | 0 | 9 | 10 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 2 |  |  | 2 |  | 550 | \＄3，000 |
| 24.36 | Dowagiac | High School | Geo．W．Green | Dept．． | 3 | $z$ | $6 \%$ | 78 | 0 | 0 | 12 | 8 |  |  | 11 | 6 | 7 | 3 | 4 |  | 1，263 | 35， 0100 |
| $242 \sim$ | Dryden | －．do ．－．．． | Fred Proesamle | Dept．． | 1 | 0 | 湤 | 21 | 35 | 46 | －．． |  |  |  | 5 | 5 | 4 | 1 | 3 |  | 200 | 1，50） |
| 24：28 | Dundee | Union School | G．A．Dennison． | Dept．． | 1 | 1 | 2 | 35 | 0 | 0 |  |  |  |  | 5 | 7 |  |  | 4 |  | 361 | 20，000 |
| 24：39 | Durand | High School． | F．W．Wheaton ．．．．－－－ | Dept．． | 2 | 0 | \％8 | 40 | ${ }^{0}$ | 0 |  |  |  |  | 1 | 0 |  |  | 4 |  | $3: 5$ | 16，000 |
| 2430 | East Jordan | －－－do－－－－－－ | Miss Rose Bemniug ．－． | Dept．． | 1 | 1 | 14 | 333 | 0 | 0 | 2 | 3 | 1 | 0 |  |  |  |  | 4 |  | 180 |  |
| 2431 | East Tawas． | －－do | Mrs．Lavilla H．Camp． bell． | Dept．－ | 1 | 1 | 20 | 4.4 | 0 | 0 |  |  |  |  | 1 | 7 |  |  | 4 |  | 800 |  |
| 243\％ | Eaton Rapids． | －do | Wm．G．Bauer，B．S ．－． | Dept．． | 2 | 3 | 60 | 70 | 0 | 0 | 9 | 11 | 17 | 14 | 8 | 18 | 4 | 8 | 4 |  | 500 | 40， 000 |
| 2433 | Eau Claire．．．． | ．do | Jolin A．Rgese ．－．－－－－－ | Dept．． | 1 | 0 | 0 | 6 | 54 | $4 \%$ |  |  |  |  | 0 | 4 |  |  | 1 |  | 210 | 3， 500 |
| 24334 | Edmore．． | －do | H．J．Wilson－－－－－－－－－－ | Dept．． | $\stackrel{3}{1}$ | 0 | 18 | $3 \cdot 1$ | 12 | 21 | 1 | 4 | 1 | 0 | 1 | $\because$ | 1 | 0 | 3 | －－－ | 800 | 4，060 |
| 2435 | Edwardsburg | do | V．D．Hawkins ．－．．．．．．－ | Dept．． | 1 | 1 | 30 | \％ | 30 | 46 |  |  |  |  | 3 | 6 | 0 | 2 | 4 |  | 300 550 | 4.000 28.000 |
| 2436 | Elk Rapids ．－． | －－－．do | Miss Frances A．Rich． ardson． | Dept．－ | 1 | 2 | 2： | $\because 0$ | 0 | 0 | －－－－ |  |  |  | 5 | 1 | 3 | 0 | 4 | －－－ | 550 | 28，0010 |
| 2437 | Elsie | －do | E．G．Van Deventer－． | Dept．－ | 1 | 1 | 23 | 99 | 0 | 0 |  |  |  |  | 1 | 0 |  |  | 4 |  |  | 4，000 |
| 2438 | Escanaba | ．do | H．G．Paul－－．．．－－－－－－－－ | Dept．． | 3 | 2 | 45 | 57 | 0 | 0 | ．．．． |  | 10 | 12 | 5 | 5 | 3 | 2 | 4 | －－． | 1，400 | 30，000 |
| 2439 | Evart－ | －do | E．P．Reynolds | Dept．－ | 2 | 1 | 45 | 50 | 0 | 0 |  |  |  |  | 4 | ， | －－－ | －－ | 4 |  | ${ }^{6} 100$ | 14，000 |
| 2440 | Ewen | －do | O．R．McDonald | Dept．． | 1 | $\left.{ }^{( }\right)$ | 1： | 16 | 33 | 60 |  |  |  |  | 2 | 1 |  |  | 2 | －－ | $3 \%$ | 5， 000 |
| 2441 | Farwell | do | Clark B．Chatfee－－－－－ | Dept．． | 1 | 1 | ${ }^{6}$ | $1 . t$ | 0 | 0 |  |  | $\cdots$ |  | 1 | 4 | 0 | 3 | 2 |  | 50 | 5， 000 |
| $24 \%$ | Fennville | ．do | Chas．F．Bacon－－－－－－－ | Dept．． | 1 | 0 | 20 | 2\％） | ${ }^{0}$ | 0 | 3 | 3 |  |  | 1 | 5 |  |  | 3 |  | － 40 | 3，000 |
| 2413 | Fenton． | do | Lew D．Remington ．．．． | Dept．． | 2 | 1 | 411 | 43 | 0 | 0 |  |  | 5 | $\frac{7}{6}$ | ${ }^{6}$ | ${ }_{6}$ | ${ }^{6}$ | 4 | 4 | －－－－ | 1，200 | 18，000 |
| 2444 | Flat Rock | Union School | Walter 1 ．Riggs－－－－－－ | Dept．． | 1 | 1 | 18 | \％1 | 0 | 0 | 0 | 1 | 1 | $\stackrel{3}{2}$ | 1 | 3 | 1 | 3 | 4 |  | 350 | 12，000 |
| 24.5 | Flint | High School | Geo．W．Peavy ．－．－－．．．－ | Dept．． | 7 | 6 | 168 | 215 | 0 | （） | ： | 5 | 4 | 9 | 36 | 15 | 8 | 15 | 4 |  |  |  |
| 2146 | Flushing | －－－．do－－－－－－ | W．R．MacDonald．－．．．． | Dept．．． | 1 | 1 | 18 | 30 | 0 | 0 |  |  |  |  | 1 | 5 | 1 | ： | 4 |  | 350 | 8，000 |









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TABLE 42.—Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.


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| $\begin{array}{l:c:c} \hline-\infty & -1-1 & \\ \hline \end{array}$ | $\begin{array}{l:l}\vdots & \mathcal{E} \\ \vdots & \vdots\end{array}$ |  | 1 ior ： ： <br> ：    |
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| Miss Ina A．Godfrey |
| :---: |
| C．T．B．Stowell |
| F．T．Aldrich |
| B．S．Hopkins |
| L．H．Metras |
| 3．O．Gillespie |
| Geo．D．Cooley |
| Miss Edna M．Hol－ brook． |
| C．H．Carrick |
| W．J．Morrison |
| W．L．Wrigh |
| H．Z．Wilber |
| T．P．Bauer |
| C．H．Burgess |
| Frank Smith |
| Miss Florence E． |
| Barnard． |
| George A．Lacure |
| W．V．sage |
| J．M．Chapman |
| J．H．Heil |
| A．T．Faserman |
| Frank E．Romin |
| H．D．Wotring |
| H．B．Krogman |
| H．W．Daniels |
| W．R．Stovens |
| E．R．Wilcox |
| F．E．Fanlkne |
| H．D．Minchin |
| J．W．Robinson |
| Orvice La Bount |
| John Loefiler |
| Miss Mary B．Hubbard |
| G．W．Harvey |
| Ira J．Houston |
| Miss Clemmie E．Mar－ tin． |
| L．M．Mekoy |
| N．J．Drovyor |
| J．A．Clappel |
| W．F．Lewis |
| E．M．Plunkett（supt．） |
| L．H．Wood． |
| J．H．Baxter（supt．） |
| I．H．Pennington |
| Wilson H．Davis |
| Miss Minnie E．Walter |
| Miss Margaret Browne |
| W．G．Glazier |

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TABLE 42.—Statistics of public high schools in the United States for the scholastic year 1899-1900—Continued.



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| Miss Martha J. Sturgis |
| Miss Mary Ulrich |
| F. B. Buck |
| John B.Jackson |
| Miss Mary S. Travis... |
| F.J.Tooze |
| M. T. Skinuer |
| P. A. Latta |
| Miss E. Olive |
| H. S. Voorhees |
| E. N. Pitkin |
| Charles Meach |
| W.L. Gillette |
| A. D. Prentice |
| Guy O. Doxtader |
| L. L. Coates |
| George G. Stroel |
| W.H.Pearce |
| Luman Burc |
| G. N. Otwell |
| E. L. Small |
| Miss Hattie W |
| Miss Lillie C. Smith |
| L. M. Kellogg |
| L. Catherm |
| Warren M. M |
| John E. Fox |
| E.H.Ryder |
| C.O.Smith |
| Edward M. McElroy .- |
| C.L. Schram |
| S. J. Bole |
| Austin E. Wil |
| W.B. Sheehan |
| H. C. Robinson |
| Harry M. Snow |
| Ernest M. Vrom |
| Geo. R. Brandt |
| I. A. Beddo |
| B. Bennett |
| B. R. Miller |
| F.J. Hendersh |
| Frank E. Knap |
| Miss Franc |
| F. C. Dunham |
| Miss Louise Kilbourne |
| Roo |
| Wm. B. Arbaug |



[^126]Table 42．－Statistics of public high schools in the United States for the scholastic year 1899－1900—Continued．

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요



James W. Beard.

| James W. Bear |
| :---: |
| D.L. Ross |
| J.R. Reynolds |
| J.A.Martin |
| W.B.Stark |
| V.D.Rowe |
| G. F. Foyd |
| D. F. Spradling |
| J. W. Watt |
| J. F. Cadenhea |
| M. P. Hendric |
| E.F.Billington |
| Charles H. Spess |

 W. H. Rowan
J.B. Cleveland Prof. D.C. Hull


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|  |  |  |  | e） |  |  | High School |
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Table 42．—Statistics of public high schools in the United States for the scholastic year 1890－1900—Continued．

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Table 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.


TABLE 42.-Statistics of public high schools in the United Siates for the scholastic year 1899-1900—Continued.


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TABLE 42.—Statistics of public high schools in the United States for the scholastic year 1899-1900—Continued.



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TABLE 42.—Statistics of public high schools in the United States for the scholastic year 1S99-1900—Continued.



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TABLE 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900—Continued.


Table 42．－Statisties of mulie high schools in the United States for the scholastic year 1899－1900－Continued．

|  | State and post－ office． | Name． | Principal． | Depart－ ment or in－ depen－ dent． | Second－ aryin－ ors．． |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  | Ele－ men－ tary stu－ dents． |  | Preparing for college． |  |  |  | Gradu－ ates in 1910. |  | College prepar－ atory stu－dents in the class that gradn－ 1900. |  |  |  |  |  |
|  |  |  |  |  |  |  | $\begin{gathered} \text { Classi- } \\ \text { cal } \\ \text { course. } \end{gathered}$ | $\begin{aligned} & \text { Scien- } \\ & \text { tific } \\ & \text { course. } \end{aligned}$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | $\begin{aligned} & \text { 感 } \\ & \text { 品 } \end{aligned}$ | 突 |  |  |  |  | $\begin{aligned} & \text { 采 } \\ & \text { 폅 } \end{aligned}$ | $\begin{gathered} \dot{8} \\ \text { g } \\ \text { g̈ } \\ \text { H } \end{gathered}$ |  | $\left\lvert\, \begin{gathered} \dot{9} \\ \text { 亗 } \\ \text { g } \\ \text { E } \end{gathered}\right.$ |  |  |  |  |  |  |  |  | $\begin{gathered} \text { 臭 } \\ \text { 品 } \end{gathered}$ |  |
|  | 1 | ¢ | ： 3 | ， | 5 | 6 | g | 6i |  |  | （1） | 10 | 11 | 12 | I：$B^{\text {a }}$ | 04 | 15 | 16 | 18 | 18 | ก19 | （1） | 211 | 12 |
|  | NRW HAMPSHiRE continued． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3213 | Miliord | High School | Cozswell Smith，A．B． | Dept． | 2 | 3 | $3{ }^{\sim}$ | 4. | ${ }^{0}$ | 0 | 6 | 9 | $\because$ | 0 | 4 | 8 | 0 | 5 | 4 | \％ 0 | 220 | \＄50，000 |
| 3414 | Milton Mills | do． | Ernest A．Legg． | Dept．－ | 1 | 0 |  |  | 15 | ：21） |  |  |  |  | 0 |  | 0 |  |  |  |  | 3，500 |
| $340 \%$ | Nashua－－．．． |  | Lemuel S．Hastings ．－ | Dept．－ | $\stackrel{3}{1}$ | 1 | $10 \%$ | 116 | 0 | 0 |  |  |  |  | 18 | 24 | ${ }_{0}^{6}$ | 0 | 4 | 102 | 5 | 100,000 3,000 |
| 3406 | New Boston |  | Miss Mildred C．War－ | Dept．－ | 0 | 1 | 14 | 14 | 0 | 0 | 0 | 0 |  |  |  |  | 0 | 0 | 4 |  |  |  |
| 3407 | Newmarket | do | Wm．＇T．Atwood | Dept－ | 1 | 1 | 12 | 14 | 0 | 0 |  |  | 1 | 0 | ， | 1 | 1 | 0 | 3 |  |  |  |
| 3408 | Newport | Richards High School | Chas．L．Curtis． | Dept．－ | 1 | 3 | 45 | 48 | ${ }^{0}$ | 0 | 5 | 7 |  |  | 5 | 4 | 0 | ， | 4 | 25 | 300 | 50,000 |
| 3409 | Newton． | High Schoo | Ernest L．Silver | Dept．－ | 1 | 1 | ${ }^{8}$ | 10 | 11 | ， | 0 | 0 | 0 | 2 | ， | ${ }_{6}^{0}$ | 0 | 0 | 3 |  | 50 |  |
| 3411 | Pittsfield | －do | Warten E．Fisker | Dept．－ | 1 | ${ }_{2}$ | 27 | 213 | 0 | 0 | $\stackrel{3}{8}$ | 1 | 3 | 0 | \％ | $1:$ | 4 | 1 | 0 |  | 200 | 10，000 |
| 3412 | Plymouth | do | Paul R．Jenks ．－－ | Dept．．． | 1 | 3 | 38 | 49 | 0 | 0 | ${ }_{6}$ | 3 | 4 | 1 | 4 | 11 | 3 | 0 | 4 |  | 2，500 | \％0，000 |
| 3413 | Portsmonth | do | Robt．M．Brown | Dent．－ | 4 | （ | 92 | 137 | 0 | （） | 7 | 1 | 9 | ， | 1\％ | ： 2 | 4 | 1 | 4 |  | 500 | 25，000 |
| 3414 | Raymond． |  | Miss Emma F．Griffin | Dent．． | 0 | ？ | 7 | 10 | $1:$ | 11 |  |  |  |  | 0 | 0 | 0 | 0 |  |  |  |  |
| 3415 | Salmon Falls | Franklin High School | E．A．Pugsley ．．．．．．．．．． | Dept．－． | 1 | 0 | 8 | 10 | 15 | 5 | （） | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |  |  | 6，000 |
| 3416 | Somersworth． | High School－．－．．．． | C．C．Ferguson． | Dept．－ | 1 | 0 | 49 | 4.4 | 0 | 0 | 10 | 18 | 16 | 0 | 4 | \％ | 0 | 2 | 4 |  | 200 | 20，000 |
| 3417 | Sunappee． |  | R．M．Barton．． | Dept．． | ， | ， | $\because 1$ | 15 | 0 | 0 | 4 | 1 |  |  | 4 | 4 | 4 | 0 | 4 |  |  | 2，000 |
| 3418 | Troy |  | Chas．J．Ross． | Dept．－ |  | 0 | 1 | ${ }_{6}$ | 4 | 6 |  |  |  |  | ， | ${ }_{6}$ | 0 | 2 | 1 |  |  |  |
| 3419 | Walpole |  | Geo．O．Smith | Dept－－ | 1 | 0 | $1: 2$ | 13 | 30 | 30 |  |  |  |  | ， | 0 |  |  | 3 |  |  | 1：2，000 |
| 3420 | Warner | Symonds High School | Arthur R．Webster | Dept．－ | ， | 1 | 21 | 28 | 0 | 0 | 0 | 0 | 2 | 3 | 1 | 7 | ， |  | 4 | 48 | 350 | 10，000 |
| 3421 | West Lebanon | High school－．－．．．－． | Geo．W．（Xilman． | Dept．． | 1 | 0 | 13 | 10 | 57 | 61 | 3 | $\stackrel{2}{1}$ | 5 |  | 0 | 4 | ${ }^{0}$ | 1 | 4 |  | 60 | 10，000 |
| $3+20$ | Whitefield | －－－－do－－－－－－－． | Wm．B．Noyes－－．．．． | Dept－－ | 1 | 1 | 16 | 13 | 0 | ${ }_{0}^{0}$ | 4 | 1 | 0 | 1 | 3 | 1 | $\stackrel{3}{1}$ | 0 | 4 |  | 150 | 8，000 |
| 3423 | Wilton－．．．．． |  | Ernest V．Robinson | Dept．－ | 1 | 1 | 15 | ${ }^{1} 7$ | 0 0 | 0 | $\stackrel{2}{2}$ | 0 |  |  | $\stackrel{1}{2}$ | 5 | 1 | 0 | 4 |  |  |  |
| 3421 3425 | Winchester Woodsville | －union High School | Vryling IV．Buffum S．W．Robertson ．－． | Dept．． | 0 | 0 | 19 | $1 \begin{aligned} & 21 \\ & 14\end{aligned}$ | 0 | 0 0 0 | （） | 0 | $\stackrel{2}{0}$ | 0 | $\stackrel{2}{1}$ | 0 | 0 | 0 | 4 |  |  | 30，000 |




Table 42.—Statistics of public high schools in the United States for the scholastic year 1890-1900—Continued.



| 3489 | Port Repulblic |  |
| :---: | :---: | :---: |
| 3490 | Rahway |  |
| 3491 | Ramsey | Public School |
| 3492 | Raritan | High School |
| 3493 | Redbank | do |
| 3494 | Ridgewon |  |
| 3495 | Rockaway | Borough Hig |
| 3496 | Roselle |  |
| 3497 |  | Livingston High School. |
| 3498 | Rutherford | Park Avenue School |
| 3499 | Salem | High School ...-.-. --.... |
| 3500 | Scotchplains. | Fanwood Township School No. 1. |
| 3501 | Scullville | High School No. $2 . .$. |
| 3502 | Somerville | High School |
| 3503 | South Amboy | -do |
| 3504 | South Orange. | - |
| 3505 | Stockton | - |
| 3506 | Summit |  |
| 3507 | Swedesb | .-.do |
| 3508 | Tenafly | Public Schoo |
| 3509 | Tom's River | High School |
| 3510 | Trenton | High School |
| 3511 | .-..-do | New Jersey Model School. |
| 3512 | Union | Connecticut Farms High School. |
| 3513 | Vineland | High School .-.......-. |
| 3514 | Washington |  |
| 3615 | Weehawken . | Town of Union High School. |
| 3516 | Westfield | Lincoln High School .- |
| 3517 | West Hoboken | Higlu School |
| 3518 | West Orange | -- do |
| 3519 | Woodbridge | - |
| $35 \div 0$ | Woodbury | -d |
| $35 \% 1$ | Woodstown | - |
|  | NEW MEXICO. |  |
| $30^{29 \%}$ | Albuquerque | High School |
| 3593 | Carlsbad..-. | -.--do |
| $35: 4$ | Deming | -do |
| $35 \%$ | East Lasvegas | - - d |
| $35 \% 6$ | Gallup | -do |
| 3527 | Raton | -do |
| 3528 | Santa Fe | -do |

Table 42．－Statistics of mublic high schools in the United States for the scholastic year 1899－1900—Continned．

|  <br>  |  |  |  | ${ }_{\text {en }}^{\text {en }}$ |  |  <br>  |  |
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Table 42．－Statistics of public high schools in the United States for the scholastic year 1899－1900－Continued．

|  | State and post－ office． | Name． | Principal． | Depart－ ment or in－ depen－ dent． | Second－ ary in－ ors． |  | Students． |  |  |  |  |  |  |  |  |  |  |  | Length of course in years. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | Ele－ men－ tary stu－ dents． |  | Preparing for college． |  |  |  | Gradu－ ates in 1900. |  | College atory stu－ dents in the class that gradu－ 1900. |  |  |  |  |  |
|  |  |  |  |  |  |  | $\begin{gathered} \text { Classi- } \\ \text { cal } \\ \text { course. } \end{gathered}$ | $\begin{gathered} \text { Scien- } \\ \text { tific } \\ \text { course. } \end{gathered}$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | $\underset{\text { 玉゙ }}{\stackrel{y}{5}}$ |  |  |  | 采 |  |  |  |  |  | $\begin{aligned} & \text { 禺 } \\ & \text { 䭾 } \end{aligned}$ |  | $\begin{gathered} \stackrel{\text { ® }}{\substack{\tilde{J}}} \end{gathered}$ |  |  |  |  |  | $\stackrel{\dot{~ d ~}}{\stackrel{\pi}{\hbar}}$ |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |  | 9 | 10 | 11 | 12 | 113 | 14 | 15 | 16 | 17 | 15 | 19 | 20 | 21 | 92 |
|  | NEW YORK－Con－ tinued． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3595 | Chatham． | High School | Wilbur H．Lynch． |  |  |  |  |  |  |  |  | 12 |  |  |  |  | 1 | 4 | 4 |  | 5，000 | \＄45， 630 |
| 3596 | Chester | －．．．do－－．．．． | W．A．Wheatley．－ | Dept．－ | 1 | 2 | 34 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 4 |  | 1，500 | 13，000 |
| 3597 | Chittenango－．．．．． | Yates High school | Wm．M．Fort，Ph．B． | Dept．－ | 1 | $\stackrel{2}{2}$ | 15 | 35 | 0 | 0 | $\stackrel{\sim}{2}$ | 3 | $\stackrel{2}{0}$ | 5 | $\stackrel{2}{2}$ | 7 | 2 | 7 | 4 |  |  | 16，000 |
| 3598 3599 | Churchville．．．．．．－－ | High School | N．Lee ．－．．．－－－－－－－－－ | Dept．． | 1 | $\underset{1}{2}$ | 130 | $\stackrel{40}{23}$ | 0 39 | ${ }_{4}^{0}$ | 10 | 8 0 | 0 0 | 0 | 3 | $\stackrel{4}{2}$ | 0 | 0 | 4 |  | 1,000 325 | 14,000 3,000 |
| 3600 | Clarence ．－－－－－．．．．． | Parker High School． | Frank K．Sutley－－－ | Dept．－ | 1 | 3 | 35 | $3{ }^{3}$ | ${ }_{0}$ | 0 | 1 | 0 | 1 | 0 | 4 | 6 | ， | 1 | ， |  | 1，300 | 8，000 |
| 3501 | Clayton－．．－．．．．．．－．－． | High School ．－．．．－．－ | Ernest Robinson－－－ | Dept－－ | 1 | $\stackrel{2}{2}$ | 56 | 54 | 0 | 0 | 3 | 4 | $\stackrel{2}{2}$ | 1 | 4 | $\stackrel{2}{2}$ | 1 | 1 | 4 |  | 659 | 31， 25.2 |
| 3602 | Clayville．．．．．．．．．．． | －－－．－do | Stanard D．Butier | Dept．． | 1 | 2 | 27 | $3 \overline{3}$ | 0 | 0 | 3 | 1 |  |  | 3 | 6 | ， |  | 4 |  | 653 | 7，500 |
| 36103 | Clifton Springs ． | ．．do | H．G．Wolcott－－ | Dept．－ | 1 |  | 21 | 28 | 0 | 0 | $\stackrel{2}{2}$ | 1 |  |  | $\stackrel{3}{3}$ |  | $\stackrel{2}{2}$ | 0 | 4 |  | 803 | 5，426 |
| 3604 | Clinton－－－－－．．－－ | ．do | Percy L．Wight | Dept－－ | 2 | 3 | 38 | 56 | 0 | 0 | 18 | 2 | 2 | 1 | 3 | 1 | 3 | 1 | 4 | $\cdots$ | 2，070 | 37，000 |
| 3605 | Clyde．－ |  | Chas．E．Allen． | Dept．－ | 1 | 5 | 70 | ${ }^{82}$ | 0 | 0 |  |  |  |  | 6 | 11 | 7 | 0 | 4 |  | 2，000 | 40， 000 |
| 3606 | Cobleskill |  | W．H．Ryan，A．M | Dept．－ | 1 | $\stackrel{\sim}{2}$ | 45 | 113 | 0 | ， | 12 | 8 | 15 | 12 | 8 | 5 | ， | 1 | 4 |  | 1，500 | 47，700 |
| 3607 | Cohoes | Egberts High School．－．． | Win．P．Thomson | Dept－－ | ， | 1 | 31 | \％ 5 | 0 |  | 6 | 11 | 0 | 0 | 3 | 8 | 3 | ， | 4 |  | 1，200 | 30，000 |
| 3608 | Coldspring | Haldane High School ．．． | Otis Montrose | Dept．－ | 1 | 1 | 25 | 18 | 0 | 0 | 1 | 1 | 3 | 1 | 3 | 1 | $\stackrel{2}{2}$ | 0 | 4 | 25 | 2，500 | 41，550 |
| 3609 | Cooperstown－－－－－ | High School－－－－．－－－－－．．－ | W．D．Johnson | Dept－－ | 1 | 5 | ${ }^{68}$ | 81 | 0 | 0 |  |  |  |  | 13 | 13 | 10 | 5 | 4 |  | 4，000 | 22，000 |
| 3610 | Copenhagen | －－－do ．．．．．． | F．A．Walker | Dept－－ | 1 | ， | 29 | 43 | 0 | 0 | 1 | 0 | 3 | 1 | 2 | $\stackrel{\sim}{0}$ | 1 | 0 | 4 |  | 1，770 | 7，080 |
| 3611 | Corfu－－－－ | Union School | La Fayette Ciapp－．．．－ | Dept．－ | 1 | ${ }_{0}^{0}$ | 8 | 16 | 0 | 0 | ${ }_{0}^{0}$ | 0 | 0 | 0 | ${ }_{7}^{0}$ | ${ }_{16}$ | 0 | 0 | 4 |  | 600 | 5，710 |
| 3612 | Corinth | High School | A．M．Hollister，A．M．， | Dept．－ | 1 | 2 | 45 | 55 | 0 | 0 | 2 | 3 | ${ }^{6}$ | 0 | 7 | 16 | 4 | 3 | 4 |  | 1，200 | 40，000 |
| 3613 | Corning | Free Academy | Leigh R．Hunt | Dept．－ | 1 | 4 | 73 | 83 | 0 | 0 | 2 | 1 | 20 | 15 | 1 | 12 | 4 | 12 | 4 |  | 935 | 60，090 |
| 3614 | Cornwallon－Hud－ | High School ．．．－． | F．C．White．－． | Dept－－ | 1 | 2 | 10 | 35 | 0 | 0 | ． | 1 | 0 | 1 | 0 | ， | 0 | 0 | 4 |  | 903 | 23，400 |
| 3515 | son． <br> Cortland． | Union School． | F．E．Smith |  |  |  | 41 |  | 0 | 0 |  |  | 0 | 0 |  | 12 | 0 | 0 | 3 |  | 1，450 |  |
| 3616 | Coxsackie．．． | High School．－ | George W．Fairgrieve | Dept．－ | 1 | 2 | 31 | 23 | 0 | 0 | 4 | 1 | 6 | 0 | 1 | 2 | 1 | 2 | ． |  | 720 | 27，000 |









Union School..
 Geo. W. Pye ............... James Eggenkerger... Ph. B. F. M. Markham Dwight B. Williams. Samuel R Brown, A.M Nelson L. Coleman Clifton. J. Melrose Edward C. Hawley -H. G. Bishop-............
 A. E. Chase ............. E.F.Brown
John H. Clark, A. Edwin B. Robbins. .-. A. C. Anderson........ Ph. B. C. Coleman, Ph. B
Wussell H. Bellows .Samuel J. Slawson
Hamilton Terry, A.
 Francis
Pli.D.
George R. Raynor
B. G. Clapp --.... R. Clifton Gibbs- W. HrantaGood win-
W. J. Matthews....
George M. Davison
 Robe W. De Groat Raymond E. Brown

## Crownpoint

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& \text { Falconer-....... } \\
& \text { - }
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Fort Covington
Fort Edward
Frankfort
Table 42.-Statistics of public high schools in the Uniied States for the scholastic year 1890-190n-Continnedi.



| 3685 | Hornellsville. |  |
| :---: | :---: | :---: |
| 3686 | Horseheads. | do. |
| 3687 | Howaid | Graded School |
| 3688 | Hudson | High Sichool .. |
| 3689 | Huntington | Union School |
| 3690 | Hion | High School |
| 3691 | Irvington | -...do |
| $369 \%$ | Islip | do |
| 3693 | Ithaca | do |
| 3694 | Jamaica | do |
| 3695 | Jamestown | do |
| 3696 | Johnstown | do |
| 3697 | Keeseville | -d |
| 3698 | Kingston | Academy |
| 3699 | Knowlesville | Union School |
| 3700 | Lancaster | High School |
| 3701 | Lawrence | High School |
| $3 \% 08$ | Leonardsville | Union School and Academy. |
| 3703 | Leroy | High School |
| 3T04 | Lestersh | Union Schoo |
| 3705 | Liberty | High School |
| 3706 | Limestone | Union School |
| $370 \%$ | Lisle | Union School and Academy. |
| 3108 | Littlefalls | High School |
| 3709 | Iiveryool | Union School |
| 3710 | Long Island City | Figh School |
| $3 \% 11$ | Lowville | State Street School |
| 3712 | Lyndonv | High School |
| 3 3̃13 | Lyons | do |
| $3{ }^{2} 1 \frac{4}{2}$ | Macedon | Union scho |
| $3 \% 15$ | Mectraw | . do. * |
| $3 \% 16$ | Madison | - -d |
| 3717 | Madrid | - do |
| 3718 | Malone | Franklin A cademy* |
| 3719 | Manlius | High School |
| 3720 | Marathon | Union School |
| $3 \% 21$ | Margaretville | High School |
| $37 \%$ | Massena. | ....入゚○. |
| $3{ }^{\text {3 }}$ | Matteawan | -do |
| Bret | Mayville. | -do |
| 3795 | Mechanicsville | d |
| $37 \% 6$ | Medina |  |
| $37 \sim \sim$ | Mexico | Academy and High School. |
| $3 \% 28$ | Middleburg........ | High School |

Table 42.-Statistics of pmblic high schools in the United States for the scholastic year 1899-1900—Continued.





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| Rockaway Beach_ | Union Schoo |
| :---: | :---: |
| Rockvillo Center. | South Side High School |
| Rome | High School |
| Rondout | Ulster Academy * |
| Pouse Poi | Union School. |
| Rushford | -do |
| Pushville | do |
| Sag Harbor |  |
| St. Johnsville | High School |
| St. Regis Falls | Union School |
| Salamanca | High School |
| Salem | Washington A Academy |
| Sandycre | High School.. |
| Sandyhill | -..- do .-. |
| Saratoga Springs. | - do |
| Saugerties | do |
| Sauquoit | Academy |
| Savannal | High Śchool |
| Savolla | -do |
| Say ville | do |
| Schenectady | Union Classical Institute |
| Schenevus | High Sclıool |
| Schoharie | Academy |
| Schroon Lake | Union School |
| Schuylervil | High School |
| Scottsville | Union Sclioo |
| Seneca Falls | Mynderse Academy |
| Sharon Sprin | Union School |
| Sherburne | High School |
| Sherman | ...-do |
| Shortsville | - do |
| Sidney | -do |
| Silvercree | .do |
| Sinclairvills | do |
| Sing Sing | . do |
| Skaneateles | . do |
| Smithville Fla | Smithviil.e Union School |
| Solvay | High School |
| Southampton | ....do |
| South Glens Falls_ | do |
| South New Berlin | Union Schoo |
| Spencer | Academy |
| Springville | Grifith Instituto |
| Stamford | Seminary and Union School. |
| Stillwater | High Schoo |
| Syracuse............ | - do |
| Tarrytown .-.... | Washington Irving High School. |

[^127]Table 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900—Continued.


TABIE 42.-Statistics of public high schools in the United States for the schoilastic year 1899-1900-Continued.



EDUCATION REPORT, 1899-1900.
Table 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.


Table 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.







| 4071 | Cincinnati | Hughes High School |
| :---: | :---: | :---: |
| $40 \%$ | Cincinnati (station H). | Norwood High School .- |
| 4073 | Cincinnati ...... | Woodward High School |
| 407. | Circleville | Everts High School |
| $40 \% 5$ | Clarington | High School .-.... |
| 4076 | Clarksville | -...do. |
| 4077 | Cleveland | Central High School |
| 4078 | do | South High School |
| 4079 | do | West High School |
| 4080 | Clifton | High School. |
| 4081 | Clinton |  |
| $408 \%$ | Clyde. |  |
| 4083 | Coalgrove |  |
| 4084 | Collinwood | do |
| 4085 | Columbiana |  |
| 4086 | Columbus | Contral High Sch |
| 4087 | do | East High School |
| 4088 | do | North High School |
| 4089 | Columbus Grove | High School |
| 4090 | Congress |  |
| 4091 | Conneaut |  |
| 4090 | Conover | Lena and Conover High School. |
| 4093 | Continental | High School |
| 4094 | Convoy | - |
| 4095 | Coolvill | - do. |
| 4093 | Copley | -do |
| 4097 | Corning | -do |
| 4098 | Cortland |  |
| 4099 | Coshocton | do |
| 4100 | Covington | do |
| 4101 | Crestlin | do |
| 410: | Creston |  |
| 4103 | Cridersvill | -.-.-d |
| 4104 | Croton | do |
| 4105 | Cumber | do |
| 4106 | Dalton |  |
| 4107 | Danvill | Danville and Buckeye Union School. |
| 4108 | Dayton | Steele High School |
| 4109 | Dean.. | Van Buren Township High School. |
| 4110 | Deavertow | High School .... |
| 4111 | Deerfield |  |
| $411 \%$ | Defiance | do.* |
| 4113 | Degraff, | do |
| $411 \frac{1}{6}$ | Delawar |  |
| 4115 | Vellroy |  |
| 4116 | Delphos |  |
| $411 \%$ | Dennison |  |

Table 42.-Statistics of public high schools in the Thited States for the scholastic year 1890-1900-Continued.

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 Statistics of 1898-99
TABLE 42.--Statistics of public high schools in the United States for the scholastic year 1893-1900—Continued.


TABLE 42.—Statistics of public high schools in the United States for the scholastic year 1890-1900-Continued,







| $\stackrel{1}{2}$ |
| :---: |





| Hamilton Township High School. | Samuel M. Sark |
| :---: | :---: |
| High Sichool .-.... | E. Simmons. |
| ...-.do | S. T. Dial. |
| d | H. R. Allen .-.-.-- --...- |
| d | Miss Belva Dix .-.....-- |
| do. | Miss Katharine Bowlby |
| do | C.S. Voorhees |
| d | A. C. Eldredge .-. - - - - |
| -d | G.II. Booth .-...---.-. |
| d | H. C. Koehler |
| d | J. C. Little |
| .... do .-...- -... --........ | Johns. Alan |
| Norton Center High School.* | D. C. Cooper -..----.-. |
| High School .-... | John Fr. Cramer |
| ----do .-...- | J.H. Finney |
| d | C.A. Puckett |
| d | L. M. Aiggins |
| do | W. E. Keever |
| . do | M. A. Henson |
| do | 'T.J. Williams |
| do | C. J. Foster |
|  | H. M. Findley |
| Green Township High School. | U. D. Clephane |
| High School. | W. E. Elliso |
| - - do . | Homer N. Kimball |
| do | F.B. Dyer |
| . do | H. A. Richardson.-...- |
| do. | R. C. Schlotman.-.-.-. |
| do | Mott H. Arnold |
| do | C. H. Carlisle |
| do | H. E. Dening |
| -do | D. C. Meck-..-------- |
| do | F. A. Turner |
| Mantua High School | D. W. McGlenen-.----- |
| High School. | T. Burton Snow |
| ---- do .--- - | S. B. Moul |
| do | Edward D. Meek |
| do | J. R. Campleell |
| do | C. W. Biddle (supt) |
| do | J. E. Miller.- |
| do | Calvin V. Trott |
| do | Mereaith D. Morris... |
| do | A.I. McVey |
| do | Miss Nelle Roney ..... |
| do | A. L. Baldwin. .-...... |
| do | William Johns |
| do | I. N. Van Tassell. |

## 4880 | Lockbourne ......

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Ernest T．Fale．．．．．．．．．．
Aarry G．Frost．．．．．．
Mrs．Carry Lawrence－
W．A．Saunders．．．．．．．．
W．A．Scott ．－．．．．．．．．．．

Table 42．—Statistics of public high schools in the United States for the scholastic year 1899－1900—Continued．

|  | State and post－ office． | Name． | Principal． | $\begin{gathered} \text { Depart- } \\ \text { ment } \\ \text { or in- } \\ \text { depen- } \\ \text { dent. } \end{gathered}$ | $\begin{aligned} & \text { Second } \\ & \text { ary in- } \\ & \text { struct- } \\ & \text { ors. } \end{aligned}$ |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | Ele－ men－ tary stu－ dents |  | Preparing for college． |  |  |  | Gradu－ ates in 1900. |  | College prepar－ atory dents in the class that ated in 1900. |  |  |  |  |  |
|  |  |  |  |  |  |  | $\begin{gathered} \text { Classi- } \\ \text { cal } \\ \text { course. } \end{gathered}$ | $\begin{aligned} & \text { Scien- } \\ & \text { tific } \\ & \text { course. } \end{aligned}$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | $\begin{aligned} & \text { 豆 } \\ & \text { 哥 } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { g } \\ & \text { gix } \end{aligned}$ |  | $\underset{\sim y y y y}{\|c\|}$ | $\begin{gathered} \dot{9} \\ \text { 粦 } \\ \text { 感 } \end{gathered}$ | $\begin{aligned} & \text { 票 } \\ & \hline \end{aligned}$ |  |  | $\begin{aligned} & \dot{0} \\ & \text { む̈ } \\ & \text { む̈ } \\ & \text { B } \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & \text { 哥 } \\ & \text { 采 } \end{aligned}$ |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | \％ | 8 |  |  | $\stackrel{\square}{ }$ | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 211 | $\mathfrak{2}$ |
|  | OHIO－continued． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4394 | Ney ．．．．．． | Washington Township High School． | W．W．Heater． | Ind ．． | 1 | 1 | 3 | 2 | 12 | 18 |  |  | 1 | 1 |  |  |  | －－ | 3 |  | 10 | \＄800 |
| 4395 | Niles | High School ．．．．．．．．－．．．－ | W．H．C．Newington－ | Dept．－ | 4 | 1 | 14 | 46 | 16 | 25 | 0 | 0 | ${ }_{0}^{0}$ | ， | 3 | （1） | 1 | 1 | 3 |  | 100 |  |
| 4396 | North Amherst ． |  | Miss Lillian Morse－．－－ | Dept－ | 1 | 1 | 21 |  | 0 | 0 |  |  | 3 | 110 | \％ | $\stackrel{6}{3}$ |  |  | 3 |  | 318 | 30,000 30,000 |
| 4397 4398 | North Baltimore |  | H．M．Morrison－－－－－ | Dept．－ | 1 | 1 | 18 | 20 | 2 | 35 | 0 | 0 | 1 | 0 | $\stackrel{3}{1}$ | 3 | 1 | O | 3 |  | 200 | 30，000 |
| 4399 | North Fairfield． | do | Ashley Hoffman | Dept．－ | 1 | 1 | 12 | 1： | 38 | 26 | 2 | 4 | 4 | $\geqslant$ | 0 | 2 |  |  | 4 |  | 100 | 7，500 |
| 4400 | Northfield ．．．．．．． | Central High School ．．．． | C．L．Burrell | Dept．． | 1 | 0 | 13 | 13 | 0 | 0 |  |  |  |  | 3 | 3 | ： | 1 | 4 |  | 200 |  |
| 4401 | North Kingsville | High School | Martin C．Smith | Dept．－ | 1 | 0 | 8 | 13 | 23 | 32 |  |  |  |  |  |  |  |  | 4 |  | 200 |  |
| 4402 | North Lewisburg |  | D．D．Bates－．．．．．－．－． | Dept．－ | $\stackrel{2}{1}$ | 0 | 8 | 23 | ${ }_{5}^{0}$ | ${ }_{-9}$ | 3 | 4 | －－－ | － | 0 | 6 3 | 0 | 0 | 3 |  | $\stackrel{100}{200}$ | 10,000 10,000 |
| 4403 | North Lima ．．．．．． | Beaver Township High School． | A．A．Prentice，B．S．．－ | Dept．． | 1 | 0 | 15 | 14 | 56 | \％ |  |  |  |  | 1 | 3 |  |  | 3 |  | 20 | 10，00 |
| 4404 | North Monroe－ ville． | High School－－．．．．．．．．．．．． | F．P．Tompkins | Dept．－ | 1 | 0 | 4 | 10 | 16 | 8 | 3 | ： |  |  | 1 | 2 | 1 | 1 | $:$ |  | ${ }^{0}$ |  |
| 4405 | Norwalk．－．．．．．．．． | ．do | Jas．E．Cole | Dept．－ | 1 | ， | 62 | 125 | 0 | 1 | ， | 12 | 12 | 20 | 4 | 21 | ${ }_{4}^{4}$ | 14 | 4 | －－－ | ${ }_{1} 300$ |  |
| 4406 | Oakharbor | do | Miss Mary E．Graham | Dept．－ | 1 | $\stackrel{3}{2}$ | 37 | 48 | 0 | 0 | 3 | 0 | 2 | 4 | ${ }_{6}$ | 6 | 2 | 3 | ${ }_{4}^{4}$ |  | 1，000 | 5，000 |
| 4407 | Oakwood |  | Miss Mary E．Edwards | Dept．．． | 1 | 4 | 61 | 91 | 0 | 0 | 5 | 2 | 4 | 8 | 14 | 11 | 12 | 11 | 2 |  | 60 |  |
| 4409 | Ohio City | do | G．W．Hurless ．．．．．．．．． | Dept．．． | 1 | 0 | $\stackrel{2}{2}$ | 10 | 0 | 0 |  |  |  |  | 1 | 4 | 0 | 0 | 3 |  | 0 | 15，000 |
| 4410 | Olmsted Falls | do． | W．B．Locke | Dept．． | 1 | 0 | 14 | 8 | 56 | 48 | 3 | 0 |  |  | 3 | 1 |  |  | 4. |  |  |  |
| 4411 | Orangeville． | do | Thomas Owens | Dept．－ | 1 | 1 | ${ }^{6}$ | 16 | 18 | 14 | 3 | 5 |  |  |  |  |  |  | 4 |  | 20 | $\stackrel{3}{2}, 000$ |
| 4412 | Oregonia | do | D．C．Jack | Dept．． | ${ }^{1}$ | 1 | ${ }_{4}^{10}$ | 10 | 15 0 | 25 |  |  |  |  | 0 9 | $\stackrel{2}{5}$ |  |  | 3 3 3 |  | 500 | 6，000 |
| 4413 4414 | Orrville | do | John Adams | Dept．． | 1 | ， | 47 15 | 49 | ${ }_{17}^{0}$ | 18 |  |  |  |  | 1 | 5 |  |  | 4 |  | 500 | 6，000 |

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| do | C. S. V. Bovey |
| do | S. M. Glemn, |
| Boston High S | J. B. Duzan |
| Higl School | Miss Mary E. Grenan |
| do - | J. O. Shaffer |
| Riley Township High | P. D. Amstutz |
| High Scho | Ernest C.Gray |
|  |  |
|  | W. H. Yant |
| ...-do | L.F. Chalfant (supt.) |
|  | F. W. To |
|  | H. W. N |
| do | s.v. Cox |
| do | F. A Cossrove |
| ---do | E. C . Kipinger |
| -...do | F.R.Ormsioy |
| -. - do | L. E. Gray |
| ---do | F.F. soinson |
| do | Miss Mary E. H |
| do | D. N. Cross |
| do | Geo. E. Vill |
| ---do. | W. A. Fiunt |
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| --.do | M ${ }^{\text {a }}$, Ciark |
| do | F. Pean |
| do | C.T.Coates |
| --.do | J.P. Burson |
| do | All. J. Garra |
|  | W H Beck |
| Powhatan High Scheol | W.E.Rigg |
| High School - | W.E.Eer |
|  | Dan H. Wade |
|  | T.B.Weaver |
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|  | O.G. Hershey |
|  | W. R. Turnbu |
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TABLE 42.-Statisties of public high schools in the Tnited States for the scholastic year 1899-1900-Continned.











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C．M．Sikenkerry


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$\square$ Millereek Township
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Table 42.-Statistics of public high schools in the United States for the seholastic year 1899-1900-Continued.


TABLE 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.


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Table 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900—Continued.


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| 4832 | Lewisburg |
| 4833 | Lewistown |
| 4834 | Linesville |
| 4835 | Lititz |
| 4836 | Liver |
| 4837 | Loag |
| 4838 | Lock İaven |
| 4839 | Luzerne |
| 4830 | Lykens |
| 4811 | McDonald |
| 4842 | McEwensville |
| 4843 | McKeesport |
| 4844 | McSherrystown |
| 4845 | Macung |
| 4845 | Mahanoy City |
| 4847 | Manheim |
| 4818 | Marietta |
| 4849 | Marionvi |
| 4850 | Martinsbur |
| 4851 | Marysville |
| 485: | Mauchchunk |
| 4853 | Mayfield |
| 4854 | Meanvill |
| 4855 | Media |
| 4856 | Mercer |
| $485 \%$ | Meyers |
| 4858 | Middletown |
| 4859 | Mifflinburg |
| 4860 | Mifflintowl |
| 4861 | Milford |
| 4869 | Millersbu |
| 4863 | Millhall |
| 4864 | Milroy |
| 4865 | Milton |
| 4886 | Minersvill |
| 4867 | Monongah |
| 4868 | Monroeton |
| 4869 | Montoursv |
| $48 \% 0$ | Moore |
| 48\%1 | Morrisville |
| $48 \%$ | Mountaindale |
| $48 \% 3$ | Mount Carmel |
| $48 \%$ | Mount Jackson |
| $48 \%$ | Mount Joy |

TABLE 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.


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Table 42.—Statistics of public high schools in the United States for the scholastic year 1899-1300-Continued.






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Table 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.





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| High School | Jas. W. Drake, A. B.... |
| :---: | :---: |
| Academy*. | Chas. H. Leitner .-....- |
|  | R. Cosby Newton, A.M |
| Pubilc Schoo |  |
| High School | M. D. Horton . ........... |
| - | Leonard T. Baker ..... |
| d | Chas. M. Staley --...... |
|  | Mre. Fsther Cochrane. |
| Palmotto Collegiate Institute. | O. D. Seay |
| Higi School -------.-- | T.Lew |
|  | A |
| ----- | E. H. Sloup |
|  | - Crawfo |
| New Prospect High | F.C.Bates |
| School.* |  |
| High School | F. C. Coker |
|  | W. P. Culbertson |
| Institute | T. E. Buzhar |
| High School | W. F. Wallace |
| Hoge Graded School (colored). | R. W. Mance |
| High School | J.B. Wiggins |
| Union Academy | M. MeR. MeLauchlin |
| Graded School | A. J. Thackston |
| High School | S. E.Smith |
| --.0゙O.* | Miss H. Louise Seott |
| St. Joln's High School | Jas. H. Hope |
| Graded School | J. Walter Daniel |
| Academy | L. Shurlev |
| High School | V. B. MeCuen |
| ----do | J. J3. Atkinson |
| -d | A. J. Asbill |
| C | W. P. Baskin, sup |
| Graded Sc | İ. D. Senn |
| High school | J. F. Ward |
| Graded School | Rufus Ray |
| Converse Street High Sciool. | Wm.H. Wannamaker. |
| GracedScbool(colored) - | R.M.Alexander |
| Hebron High School | G.T. Pugh |
| Graded School | H. A. C. Walkel |
| High School: | Robt. A. Law |
| Graded School | S. H. Edmunds |
| High School | G.F.Iong, jr |
| . . do.* | Mrs. Brown |
| Graded School | Davis Jeffries .-...-...- |
| High School | Mrs. M. G. Getsinger .. |
| Graded School | 'Thos. Gi. Wilkinson ...- |

Table 42.-Statistics of public high schools in ihe United States for the scholastic year 1899-1900—Continued.






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Table 42.—Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.


Table 42.—Statistics of public high schools in the United States for the scholastic year 1899-1900-Continued.


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TABLE 42.-Statistics of mublic high schools in the United States for the scholastic year 1890-1900-Continued.


Table 42．－Statistics of public high schools in the United States for the scholastic year 1802－1．900－Continued．

|  | State and post－ office． | Name． | Principal． | Depart ment or in－ depen－ dent． | Second－ ary $111-$ struct－ or＇s． |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  | Second－ar＇ystut．dents． |  | Ele－ nen－ tary stu1－ cients． |  | Preparing for college． |  |  |  | Gradu－ ates in 1300. |  | College preparatory SEt1－ dents in the class tbat gradu－ 1800. |  |  |  |  |  |
|  |  |  |  |  |  |  | Classi－ cal course | $\begin{gathered} \text { Scien- } \\ \text { tific } \\ \text { course. } \end{gathered}$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | $\begin{aligned} & \dot{9} \\ & \text { 丞 } \end{aligned}$ |  |  |  | $\frac{\dot{9}}{\stackrel{y y}{*}}$ |  | $\frac{\text { gig }}{\text { 要 }}$ |  | $\underset{\sim y y y}{c \mid c}$ |  |  |  | $\begin{aligned} & \text { 总 } \\ & \text { 置 } \end{aligned}$ |  |  |  |  |  | $\begin{gathered} \text { 亗 } \\ \text { 哥 } \end{gathered}$ |  |
|  | 1 | 4 | 3 | 4 | 5 | 6 | g | $\S$ |  |  | 8 | Hat | 11 | 12 | \％33 | 1.4 | 15 | 149 | $1{ }^{1}$ | 13 | 412 | 2 P 0 | 4 | 515 |
|  | VErmont． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5564 | Barre | Spantaing High School．． | O．D．Matthewson | Dept．－ | $\ddot{\sim}$ |  | 40 | 46 | 0 | 0 |  |  | ${ }_{6}^{6}$ | $\stackrel{2}{3}$ | $\stackrel{2}{9}$ | 6 |  |  | 4 |  | 550 |  |
| ${ }^{51565}$ | Barton ．．．．．．．．．． | Acadomy－－．－－－－－－－．．．－ | H．J．Stannard | Deppt．－ | 1 | 3 | ${ }^{62}$ | 50 | 0 | 0 | 2 | 0 | 8 | 3 | 9 | 9 | $J$ | 2 | 4 |  | 201 | \＄10，000 |
| 5566 | Barton Landing | High School | Harley R．Willard， A． B, | Dept．－ | 1 | 1 | 13 |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |
| 5567 | Bewhington | do． | W．S．C．Russell，A．M－ | Dept． | ， | 2 | 30 | 44 | 0 | 0 | 1 | ${ }^{0}$ | ${ }^{6}$ | 0 | 1 | ， | 4 | （） | 1 | 28 | 100 |  |
| 5568 | Bethel ．． | Whitcomb High School－ | Georges．Wrimat，A． B | Dept．－ | $\stackrel{3}{1}$ | ${ }_{9} 9$ | 23 | 27 30 | 0 | ${ }_{0}^{0}$ | 0 | 3 | 11 | 0 | 1 | \％ | $\frac{1}{4}$ |  | 4 |  | 200 400 |  |
| 5569 5570 | Brandon | High School－－－－－－．－．．．．．．． | M．D．Chittendea－．－．．． | Dept．－ | 1 | 1 | 18 38 | 30 <br> 39 | 9 | 6 0 0 | 5 4 | 3 0 | 10 | 0 0 0 | 4 | 5 6 | $\ldots$ | 3 0 | 4 |  | 100 | 10，000 |
| 5571 | Burlingtou | Edmunds High School ．－ | Isaac Thomas ．－－－－－－－． | Dept．． | 3 | 15 | 16 | 179 | 0 | 0 | 8 | ${ }_{6}$ | 8 | 2 |  |  |  |  | 4 |  | 3，000 | 125，000 |
| $55 \%$ | Chester ． | Central High School．．－－－ | Chas．E．Prior． | Dopt．－ | 1 | 1 | 29 | 23 | ${ }^{0}$ | 0 | 0 | 1 | $:$ | 0 | 4 | 3 | 1 | 1 | 4 | ：9 | $\times 100$ | 10，000 |
| 5573 | Enosburg Falis． | High School ．．．．．．．．．．．．－ | J．N．Greene ．－．．．．．．．．． | Dept．－ | 1 | 1 | $3{ }^{3}$ | $3{ }^{3}$ | 0 | 0 |  |  | 4 | 1 | 4 | 3 | 3 | 1 | 4 |  | 12.5 | 5，000 |
| $55 \% 4$ | Eissex Junction．－ |  | G．H．Dairymple，A．M | Dent．－ | 1 | 1 | 10 | $1 \%$ | ${ }^{0}$ | 0 |  | 0 |  |  | 0 | 2 | 0 | 0 | 4 |  | 50 |  |
| 5 5 75 | Fairhaven | －－－do－－－．－－－－ | F．A．Wheeler．．．．．．．．．． | Dept．－ | 1 | 1 | 14 | 188 | $\bigcirc$ | ${ }^{0}$ | 0 | 0 | 0 | 0 | 0 | $\stackrel{3}{0}$ | 0 | 0 | 4 |  | 4\％ |  |
| 550 | Frankliu－ | Central High School | Miss M．A．Pomeroy ．－． | Dept．－ |  | 0 3 3 | 11 | ${ }^{14} 5$ | 2 | 27 |  |  |  |  | $\stackrel{8}{\sim}$ | ${ }_{13}^{0}$ |  |  | 4 |  | 200 | ］5，000 |
| 53978 | Haxdwick | Academy－ High School－－．．．－．．．．．．．．．．．．． | Burt E．Merriam－－．．．． | Dept．．． | 1 | 3 | （2） | 53 <br> 14 | 0 4 | 9 | 1 | ${ }_{0}^{0}$ | ${ }_{0}^{2}$ | 0 | \％ | 13 9 | $\stackrel{2}{1}$ | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ | 4 |  | \％ 0 | 1：3，500 |
|  |  |  | A. M. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5579 | Hydepark ．－－．－ | Lamoille Central Acad－ | Elwin Le Roy Ingalls． | Dept． | 1 | 1 | 40 | 35 | ${ }^{0}$ | 0 | ： | 0 | 1 | 0 | 5 | 10 | 1 | 0 | 4 |  | 100 |  |
| 5580 | Island Pond | High Schooí ．．．．．．－．．．．－－ | David Wylie． | Dept．－ | 1 | 0 | 9 | 15 | 0 | 0 |  |  |  |  | 8 | $\stackrel{5}{2}$ |  |  | 1 |  | 30 |  |
| 5081 | Johnson | Training School－－－．．－．．． | Miss Eliza C．Allen ．．．． | Dept－－ | 1 | 0 | 8 | ？ | 57 | 58 |  |  |  |  | 8 | ${ }_{1}^{6}$ |  |  | 1 |  | ${ }^{(1)}$ |  |
| 5．58\％ | Ludlow ． | Black River Academy ．－－ | Arthur G．Bugbee ．．．－ | Dept－－ | 1 | 3 | ${ }_{13}$ | 53 | 14 | 13 | 3 | 1 | 7 | 8 | \％ | $1: 3$ | 2 | 4 | 1 | －－－ | 1，200 | $\text { 䈠, } 0000$ |
| 5583 | Lyndon．．．．． | Acaderay High School | Daniel Richards，jr Alfred F Howes． | Dept．－ | 1 | \％ | $\xrightarrow{17}$ | 11 | 0 | 0 | 5 | $\varepsilon$ | 1 | 10 | 8 | 3 | 4 | ＋ | 4 |  | 150 | 12，000 |


TABLE 42．－Statistics of public high schools in the United States for the scholastic year 1893－1900－Continued．

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| Cassville |
| Cedarburg |
| Centralia |
| Chetek |
| Chilton |
| Chippewa |
| Clinton |
| Clintonv |
| Cobb |
| Colby |
| Columb |
| Cuba |
| Cumberla |
| Darlington |
| Deerfield |
| Deforest |
| Delavan |
| Depere |
| Dodgevi |
| Durand |
| Eagle Rive |
| East Troy |
| Eau Clair |
| Edgerton |
| Elkhorn |
| Elroy |
| Ettrick |
| Eransvil |
| Fairchild |
| Fennimo |
| Florence |
| Fond du La |
| Fort Atkins |
| Fountain City |
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[^129]Table 42.—Statistics of public high schools in the Uniterl States for the scholastic year 1899-1900-Continued.










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Table 42.-Statistics of public high schools in the United States for the scholastic year 1899-1900-Continmed.

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Table 42.-Statistics of public high schools in the United States for the sc7.olasiic year 1899-1900—Continued.


Table 43.-Statistics of private high schools, endozed academees, seminaries,

and other private secondary schools for the scholastic year 1899－1900．

| Religious denomina－ tion． | $\begin{array}{\|c} \text { Sec- } \\ \text { ond- } \\ \text { ary } \\ \text { in- } \\ \text { struct- } \\ \text { or's. } \end{array}$ |  | Studonts． |  |  |  |  |  |  |  |  |  |  |  |  |  | Number of volumes in library． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Second－ ary stu－ dents． |  | Ele－ men－ tary stu－ dents． |  | Preparing for college． |  |  |  | Gradu－ <br> ates in 1900. |  | College prepar－ atory students in the class that gradu－ ated in 1900. |  |  |  |  |  |  |
|  |  |  | Clas． sical course． | Scien－ tific cour＇se． |  |  |  |  |  |  |  |  |  |  |
|  | $\frac{\dot{\mathrm{g}}}{\substack{3 \\ \text { Bu }}}$ |  |  |  | $\begin{aligned} & \text { 品 } \\ & \text { 茎 } \end{aligned}$ |  | $\begin{aligned} & \text { 灾 } \\ & \text { 感 } \end{aligned}$ | $\begin{gathered} \text { o } \\ \text { 采 } \\ \text { 0 } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { B } \\ & \text { B } \\ & \text { B } \end{aligned}$ |  |  |  | $\begin{aligned} & \stackrel{9}{4} \\ & \stackrel{y}{c} \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & \text { © } \\ & \text { gi } \\ & \text { gi } \\ & \text { E } \end{aligned}$ |  |
| 4 | 3 | ${ }^{6}$ | \％ | 8 |  |  | （3） | 10．${ }^{1}$ | 后直 | 18 | 1． 3 | 14 | 10 | 16 | 7 ${ }^{\text {g }}$ | 且8 | （1） | 129 | 91 | 938 |  |
| Nonsect． | 1 | 3 | 30 | 20 | 40 | 30 |  |  |  |  |  |  |  |  |  | 0 | 40 | \＄1，000 | 1 |
| Nonsect | 1 | 2 | 15 | 29 | 30 | 40 | 10 | 15 | 15 | 0 | 0 | 4 |  | 2 | 3 | 0 | 200 | 6，000 | 2 |
| Nonsect | 1 | 1 | 13 | 19 | 48 | 50 | 3 | 4 | 1 |  | 2 | 4 | 2 | 4 | 4 |  | ．－－ | 1，200 | 3 |
| Nonsect | 1 | 0 | 5 | 6 | 10 | 9 | 0 | ， |  |  |  |  |  |  |  |  |  | 1，000 | 4 |
| Nonsect | 0 | 7 | 0 | 90 | 0 | 95 | 0 | 10 |  |  | 0 | 12 | 0 | 5 | 5 |  | 150 | 20，000 | 5 |
| Nonsect | 1 | 2 | 21 | 9 | 14 | 10 | 7 | ， | 8 |  | I | 1 | 1 | 1 | 4 |  | 1，500 |  | 6 |
| Nonsect | 1 | 1 | 10 | 12 | 20 |  |  |  |  |  |  |  |  |  | 4 |  | 1， 200 | 1，000 | 7 |
| Nonsect | 1 | 0 | 10 | 15 | 90 | 85 |  |  |  |  |  |  |  |  | 4 | 0 |  | 10，000 | 8 |
| Nonsect | 1 | 0 | 2 | 5 | 23 | 30 | 2 | 8 | 0 | 3 | 0 | 3 |  |  | 3 |  |  | 2，500 | 0 |
| Nonsect． | 1 | 1 | 19 | 15 | 10 | 14 | 5 | 6 | 14 | 9 |  |  |  |  | ， | 0 | 100 | 3，000 | 10 |
| Nonsect． | 2 | 1 | 38 | 45 | 64 | 34 | 10 | $1:$ |  |  | 6 | 4 |  | 4 | 2 | 0 | 400 | 3，000 | 11 |
| Nonsect－ | 3 | 1 | 30 | 25 | 0 | 0 |  |  |  |  | 0 | 0 |  |  | 4 | 0 | 1，200 | 150，000 | $1 \cdot$ |
| Nonsect． | 1 | 1. | 18 | 18 | 28 | 20 | 1 | 2 |  | 3 |  | 4 | $\gamma$ |  | 4 | 0 | 1，000 | 5，000 | 13－ |
| Nonsect． | 0 | 5 | 0 | 38 | 5 | 60 | 0 | 30 |  |  | 0 | 0 | 0 | 0 | 5 | 0 | 1，800 | 2，000 | 14. |
| Nonsect． | 1 | 1 | 37 | 0 | 20 | 0 | 16 | 0 | 5 | ） |  |  |  |  | － | 28 |  | 10， 000 | 15. |
| Nonsect | 1 | 0 | 27 | 12 | 36 | 35 | 4 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 4 | 0 |  |  | 16 |
| Nousect | 1 | 2 | 45 | 60 | 5 | 10 | 10 | 12 | 8 | 6 |  |  |  |  | 4 | 0 |  | 5，000 | 17 |
| Nonsect | 1 | 0 | 3 | 11 | 11 | 11 |  |  |  |  | 0 |  | 0 | 0 |  | 0 | 0 | 600 | 18. |
| Nonsect． | 3 | 0 | 30 | $2 \cdot$ | 51 | 42 | 15 | 8 | 0 | 0 | 1 | ， |  |  | 4 | 0 |  |  | 19 |
| Nonsect．．． | 2 | 1 | 28 | 36 | 21 | 10 |  |  |  |  |  |  |  |  |  |  | 904 | 1，800 | 20. |
| Nonsect | 1 | 2 | 2 | 16 | 11 | 34 | 0 | 2 | 2 | 2 |  |  |  |  | 3 |  | 200 | 3，500 | 21 |
| Nonsect． | 1 | 1 | 6 | 17 | 25 | 16 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cum．Pres3 | 3 | 3 | 70 | 63 | 30 | 25 | 3 | 5 | 6 | 5 | 5 | 2 | 5 |  | 4 | 40 | 20 | 12，800 | 23 |
| Bapt．．－．．．． | 1 | 0 |  | 5 | 16 | 14 |  |  |  |  |  |  |  |  |  |  |  | 2，000 | 24 |
| Nonsect．．． | 1 | 2 | 15 | 11 | 2 | 2 |  |  |  |  |  |  |  |  | 4 | 0 | 260 |  | 25 |
| Cong－－－－－－ | 1 | 1. | ， | ， | 45 | 57 | 1 | 0 |  | 0 | 0 | 0 | 0 | 0 |  |  | 200 | 2，500 | 20 |
| Nonsect | $1$ | $1$ | 21 | 1\％ | 21 | 18 |  |  |  |  |  | 0 |  | 0 |  |  |  | 1，0¢0 | 27 |
| Nonsect | 1 | 1 | 20 | 20 | 39 | 31 | 9 | 4 | 9 | 4 | 2 | 2 | 2 | 2 | 2 |  |  | 2，000 | 28 |
| Nonsect． | 1 | 1 | 12 | 10 | 27 | 22 |  |  | 3 | 2 | 0 | 0 | 0 | 0 |  |  | 0 | 1，500 | 29 |
| Nonsect． | 1 | 1. | 11 | 17 | 12． | 9 | 1 | 3 |  |  | 0 | 3 | 0 | 3 | 4 |  |  | 2，000 | 30. |
| Nonsec | 5 | $0$ | 111 | 0 | 0 | 0 |  |  |  |  | 10 | ， |  |  | 4 | 111 | 1，000 | 60，000 | 31 |
| Bapt | 1 | 1 | 15 | 10 | 25 | 20 | 4 | 4 |  |  | 0 | ， | 0 | $\underset{ }{2}$ |  |  |  | 2，500 | 3.8 |
| R．C．．．．．－ | 0 | 4 | 0 | 22 | 0 | 21 |  |  |  |  |  | ． |  | 3 | 4 |  | 3，650 | ， | 53. |
| Nonsec | 0 | 2 | 0 | 30 | 0 | 15 |  | 20 | 0 | 10 |  |  |  |  | 4 |  |  | 10，000 | 34 |
| R.C | 0 |  | ${ }^{0}$ | 30 | 0 | 147 |  |  |  |  | 0 | 2 |  |  | 4 |  |  |  | 26 |
| Nonsect | 1 | 2 | 27 | 21 | 28 | 23 |  |  |  | $\tau$ | 0 | 0 |  | 0 |  | 0 |  | 1，003 | 36 |
| R．C．．．．．． | 0 | 4. | 0 | 14 | 0 | 110 | 0 | 6 |  | 7 | 0 | 1 |  | 1 | 4 |  | 1，000 | 50，000 | $3{ }^{4}$ |
| Nonsect．．． | 3 | 0 | 59 | 0 | 13 | 0 | 1 | 0 |  | 0 | ， | （1） |  |  | 0 | 0 |  | 9，000 | 38 |
| Cong | 1 | 1 | 14 | 11 | 26 | 19 | 1 | 1 |  | ， | 0 | 0 |  |  |  | 0 | 700 | 2，650 | 39 |
| Bapt－．．－－－ | ， | 1 | 20 | 17 | 60 | 50 | 0 | 0 | 3 | 2 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 1，800 | 40. |
| Meth－－－－－ | 1 | 0 | 10 | 12 | 30 | 32 | 4 | 6 | 2 | 1 | 0 | 0 | 0 | 0 |  | 0 | 0 | 2，000 | 41. |
| M．E．So－－－ | 1 | 2 | $3{ }^{3}$ | 20 | 20 | 20 | 20 | 17 | － | 7 |  |  |  |  |  |  |  | 2，500 | $4 \%$ |
| Miss．Bapt | 1 | 2 | ${ }^{7}$ | 12 | 38 | 53 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 3 |  |  | 2，000 | 43 |
| Nonsect．．． | 1 | $\begin{aligned} & 0 \\ & 1 \end{aligned}$ | 17 | 13 | r 8 | 5 | 1 | $\stackrel{3}{5}$ |  |  |  |  |  |  |  |  |  | 1，250 | 44 45 |
| Nonsect．．－ | 1 | $1$ | 4 | 8 | 28 | 30 | 3 | 5 |  |  |  |  |  | 0 |  | 0 |  | 1，200 | 40 |
| Nonsect． | 3 | 5 | 43 | 35 | 94 | 83 |  |  |  |  | 6 |  |  |  | 4 | 0 | 400 | 20，000 | 46 |
| Nonsect | 1 | 1 | 25 | 25 | 15 | 20 | 2 | 1 | 1 |  | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 1，000 | 47 |
| Nonsect． | 2 | 0 | 40 | 20 | 110 | 55 | 0 | 0 | 20 |  |  |  |  |  | 4 | 0 | 150 | 600 | 48 |
| Cong－－－．－－ | 6 |  | 63 | 47 | 192 | 305 | 2 | 1 | 14 | 4 | 1 |  | 1. | 5 | 4 |  |  | 134，000 | 49 |
| Bapt ．－．．．－ | 2 | 0 | 15 | 10 | 23 | 16 | 2 | ， |  |  | 0 |  | 0 | 0 |  |  |  | 800 | 50. |

Table 43.-Statistics of private high schools, endoued academies, seminaries,


[^130]and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | I | 2 | 3 |
|  | CALIFORNIA-continued. |  |  |
| $\underset{{ }_{0}^{96}}{98}$ | Menlo Park | Hoitt's School for Boys | Ira G. Hoitt |
| $\begin{aligned} & 97 \\ & 98 \end{aligned}$ | Nordbof |  | Rev. A.J. B. Vinbert |
| 99 | Oakland | Piedra Ranch). Convent of Our Lady of the Sacred Heart. | Mother Delphine.............. |
|  | Ontario -.... ${ }^{\text {Palo Alto }}$ (319 - | Chaffey Coollege ;-....-....-...-- | Wm. T. Randall, dean......-. Mrs. Anne L. Peck-.......-- |
| 100 | Palo Alto (319 Kingsiey ave.) | "Castillya Hall," Boarding and Day School for Girls. | Mrs. Anne E.Peck-.........-- |
| 101 | Palo Alto - | "Manzanita Hall,"' Preparatory School for Boys. | Frank Cramer. |
| 10: | Pasadena (49 South Euclid ave.). | Classical School for Boys. -...... | Stephen Cutter Clark .----- |
| 103 | Pasadena (124 South Euclid ave.). | English Classical School for Giris. <br> St Vincent's Acadomy | Anna B. Orton Pev. Father Clea |
| 105 | Petaluma - -................ | Academy of Our Lady of Merey- | Rev. Father Clea |
| 106 | Redwood City | Academy of Notre Dame .-..... | Sister Mary Cecilia |
| $10 \sim$ | Rio Vista | St. Gertrude's Academy. | Sister Mary Camill |
| 108 | Sacramento (1126 K st.) | Sacramento Institute | Brother Vellesian |
| 109 | Sacramento. | St.Joseph's Academy ---.......- | Sister of Mercy. |
| 111 | San Francisco (9mon Fanklin st.). | Academy of the Sacred Heart. | Madame Gor'man.- |
| 112. | San Francisco (Dolores, bet. 16 th and 17 th sts.). | College of Notre Damg..........- | Sister Mary Eernardine |
| 113 | San Francisco (1849 Jackson st.). | Hamlin School and Van Ness Seminary. | Sarah D. Ham' in |
| 114 | San Francisco (212s California st.). | Irving Institute .---------....... | Rev. Edwards B. Church, A. M. |
| 115 | San Francisco (2234 Pacific ave.). | Miss Murison's School. | E.L. Murison -. -- - - - - . - . |
| 116 | San Francisco (Fremont and Harrison sts.). | Our Lady of Mercy's Academy - | Sisters of Mercy - |
| 117 |  | Presentation Convent | Sister Mary Josephine |
| 118 | San Francisco (s. e. corner of Eddy and Larkinsts.). | Sacred Heart College | Erother Florinus |
| 119 | San Francisco (16:3 Broadway st.). | St. Brigids Convent School*. | Sister Superior |
| 120 | San Francisco (24th and Alabama sts.). | St. Peter's School (Girls) | Sister Mary O'Brien |
| 121 | San Francisco (6ir1 Mission st.). | St. Vincent's School | Sister Ger |
| 122 | San Francisco ( $3300 \mathrm{Wash}-$ ington st.). | Trinity School | Pev.E.B.Spalding |
| 123 | San Francisco (165 Devine st.). | The Washburn School | Arthur Washbur |
| 124 | San Francisco (2014 Van Ness ave.). | West's (Miss) School for Girls .- | Miss Mary B. West. |
| 125 | San Jose | St. Joseph's School. | Rev. M. Gleeson, S. J |
| 127 | San ieander | St. Mar'y's Academy |  |
| 128 | San Mateo. | Acadeny of Immaculate Heart of Mary <br> St. Margaret's School | Miss M. E. Arnold |
| 129 | ----do | St. Mathew's School | Rev. W. A. Brewer |
| 130 | San Rafael | Dominican College .-..- | Mother Louis Rev. Charles Hitcho |
| 132 |  | Mount Tamalpais Military Academy. | Arthur Crosby. |
| 133 | Santa Bar³ara. | Santa Baribara Collegiate Institute. <br> * Statistics of 1898-99. | T. H. McCune, M. A. |

and other private secondary schools for the scholastic year 1899-1900-Cont'd.

$a$ See University table for statistics of Chaffey College.

Table 48.--Statistics of private high schools, endowed academies, seminaries,


[^131]and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endoued academies, seminaries,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
|  | Connecticut-contid. |  |  |
| 1\%6 | New Haven (56 Hillhouse ave.). | West End Institute* | Mrs. and Miss Cady |
| $17 \%$ | New Haven (30 Wall st.) - | Whedon's (Miss) School for Girls and Boys. | Susan H. Whedon |
| 178 | New Haven (96 Mansfield st.). | Willard's (Miss) School ...... | Miss Charlotte A. Willard |
| 179 180 | New London | Bulkeley School <br> Williams Memorial Institute | Walter A. Tow Colin S. Buell |
| 181 | New Milford | Ingleside School | Mrs. Wm. D. Black |
| 182 183 | do | Rectory School | H. E. Taylor |
| 183 | New Preston | Upson Seminary- | Rev. Henry Upson |
| 185 | Norfolkn | Newtown Academy The Roblins School | H. B. MacFarland |
| 189 | North Stonington | The Edgar Wheeler Scho | Susie M. Lindsey |
| 187 | Norwalk | Baird's (Miss) Institute* | Mirs. Cornelia F. Baird |
| 188 | Norwalk (Fillsice) | Norwalk University Scho | W. G. Chase - Mellville M.-..... |
| 190 | Norwich .......... | Norwich Free Acadeny* | Robert P. Keep, Ph. D |
| 191 | Pomfret | Pomfret School ......... | Wm. Beach Olmsted . |
| 192 | Putnam | Notre Dame de Bon Secours Acadeny. | Sister M. Gonzaga. |
| 193 | Redding | Hill Academy * -................. | Fred J. Perrine |
| 193 | Saybrook | Shepard's (Miss) Private School | Miss F.C.Shepard |
| 196 | Southport | Seaside Seminary .-. | Auguste Smith |
| 197 | Stamford | The Catharine Aiken* | Mrs. H. B. S. Devan |
| 193 | -do | Betts's Academy | Wm.J. Betts- |
|  | Stamford (5) and | Low's (Miss) Boarding and Day | Hiram U. King - ${ }^{\text {Mew }}$ - |
|  | st.). | School for Girls. |  |
| 201 | Suifield | Connecticut Literary Institu- | Harry I. Thompson |
| 202 | Washington | The Gunnery .... | John C. Erinsmade |
| 203 | Waterbury | Academy of the Congregation de Notre Dame. | Sister St. Stanislaus |
| 204 | . . do | Gerard School .-.........-....-- | Isabel C. Lawton |
| 205 | Watertoviv | St. Margaret's Diocesan School <br> Taft's School for Boys | Miss Mary R. Hillar <br> Horace D. Taft |
| 207 | Westport | Staples High School | Bessie R. Taylor |
| 208 | Wilton | Wilton Educational School | Charles W. Whitlock |
| 209 | Winsted | Gilbert School. | John E. Clark, Ph. I |
| 210 | Woodstock ........ | Woodstock Academy | E.R.Hall .... |
| 211 | Dover. | Wilmington Conference Academy. | Vaughan S. Collins |
| 212 | Wilmington(4th and West | Friezds school. | Herschel A. Morris, A. M |
| 213 | Wilnington (Pennsylvania ave. and Franklin st.). | Hebb's (Misses) School for Girls. | Misses Hebb (E. A. and E. P.) |
| 214 | Wilmington $\qquad$ district of columbia. | Wilmington Military Academy . | Wm. F. Morrison and Thos. A. Blackford. |
| 215 | Washington | Academy of the Visitation | Sister M. Loretto Brooks |
| 216 | Washington (8th st. and Maryland ave. SW. . | Academy of the Sacred Heart of Mary. | Mother M. Clemintine, O.S.D. |
| 217 | Washington (1515 H st. NW.). | The Berkeley School .. | Charles W. Fisher |

[^132]and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed acadiemies, seminaries,

|  | Stete and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 舅 | \% | 3 |
|  | DIETRICT OE CCLUMBIAcontinued. |  |  |
| 218 | Washington "(1342 Vermont ave. and Iowa circle). | Chenoweth Instituto .a.c.e....... | Miss Mars D. Chenoweth. |
| 219 200 | Washington (2\%03 1tth st.) Washington ( 9141 th st.). | Columbian Seminary (Boys)* Emerson Instituto | Arthur T. Ramsay Charles B. Young. |
| 221 | Washington (2\%01 14th st.) | Fairmonnt Seminary (Girls). | Arthur T. Ramsay |
| 20. | Washington (1811 I st. | Friends Select School | Thomas W.Sidwe |
| 223 | Washington ( 1409 Mass. ave.). | Gunston Institute for Girls. | Beverley R. Mason |
| 221 | Washington (1512 Mass. ave.). | Holy Cross Academy. | Sister Angelica |
| 225 | Washington (1305 1\%th st. NW.). | McDonald Elis School | Edwin R. Lewis |
| 226 | Washington (1100 II st. NW.). | Mount Yermon Seminary | Mrs. Elizabeth J. Somers |
| 227 | Washington (822 Connecticut are. NW.). | National Capital University. | Warren W. Phelin |
| 223 | Washington (North Capitol and K sts.). | Notre Dame Academy | Sister Mary Euphrasia |
| $\stackrel{29}{29}$ | Washington (1206 18tust.) - | Olney Institute-...---..........- | Virginia Mason Dorsey |
| 230 | Washington (1409 Col'coran st.). | Putnam's English and Ciassical School for Boys. | William H. Putnam |
| 231 | Washington (601 East | St. Cecilia's Academy | Mother IL. Augusta |
| 238 | Washington ( 131018 th st. NW.). | The University School for Boys. | Roivert L. Preston. |
| 233 | Washington (3d and T sts. NE.). | Washington College for Young Ladies. | Flournoy Menefee |
| 234 | Washington (1850 Wyoming ave.). | Washington Heights School .-.. | Florence Martin |
| 203 | West Washington.. FLORIDA. | The Tinthicum Institate | R. C. Balinger, curator |
| 236 | Gainesville | Boarding and Day School | Miss Tebeau |
| $\begin{aligned} & 27 \% \\ & 238 \end{aligned}$ | Jacksonville | Cookman Institute Edword Wators College | H. R. Bankerd A St Georce |
| 20 | do | Florida Baptist College | Nathan W.Collier |
| 240 |  | St.Joseph's Academy | Sister M. de Sales |
| 211 | Key West | Convent of Mary Immacuiate -- | Sister Mar'y Florentine, su- |
| 24.8 | St. Augustine - | St. Josepn's Academy - .......... | Sister M. Agratha |
| $\begin{aligned} & 243 \\ & 244 \end{aligned}$ | Sam Antonio... | Convent of the Holy Names Holy Name Academy .-.......... | Sister Mary Winifire <br> Sister Catherine ... |
| 245 | Arabi | Houston High School. | Lawson E. Brow |
| 245 | Athens | Home School for Young Ladies*- | Miss Sosnowski |
| 248 |  | Jernel Academy | John H. Clark, A. M |
| 249 | Atlanta | Spelman Seminary | Miss Harriet E. Gile |
| 200 | .....do | Wasnington Seminary | Mrs. Wm. T. Chandler |
| 201 | Auturn | Peri'y-Rainey College* | J. C.Flanigan |
| 203 | Augusta | Academy of Richmond County. | Charles H. Withrow |
| 254 | do | St. Mary's Academy | Sister Mary Peter |
| 255 |  | Summerville Academy | Arthur Grabowskic, Ph. D.- |
| $29 \%$ | Buford | Walker Baptist Insti | N.W.Curtrigh |

*Statistics of 1898-99.
and oither private secondary sehools for the scholastic year 1899-1900-Cont'd.


TABLE 43.-Statistics of private high schools, endowed academies, seminaries,


* Statistics of 1898-99.
and other private secondary schools for the scholastic year 1899－1900－Cont＇d，

| Religious denomina－ tion． | Sec－ ond－ ary in－ struct ors． |  | Students． |  |  |  |  |  |  |  |  |  |  |  | Length of course in years. |  | -א.texq!! |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Second－ ary stu－ dents． |  | Ele－ men－ tary stu－ dents． |  | Preparing for college． |  |  |  | Gradu－ ates in 1900. |  | College prepar． atory students in the class that gradu－ ated in 1900. |  |  |  |  |  |  |
|  |  |  | Clas－ sical course． | $\begin{aligned} & \text { Scien. } \\ & \text { tific } \\ & \text { course. } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |
|  | $\frac{\underset{3}{3}}{\frac{0}{4}}$ |  |  |  |  |  | $\stackrel{\dot{8}}{\stackrel{y}{c}}$ |  | $\begin{aligned} & \dot{9} \\ & \text { 感 } \end{aligned}$ |  | $\stackrel{\dot{0}}{\stackrel{y y y y}{c \mid}}$ |  | $\stackrel{\dot{3}}{\stackrel{\text { cin }}{\text { cin }}}$ |  |  |  |  |  |  | $\begin{aligned} & \text { © } \\ & \text { む్ } \\ & \text { む } \\ & \text { E. } \end{aligned}$ |  |
| 4 | 5 | 6 | y | 8 |  |  | 9） | 10 | 11 | 1．${ }^{2}$ | 38 | 14 | 15 | 18 | 18 | 18 | 15 | 50 | 2䞨 | 9\％ |  |
| Nonsect | 1 | 0 | 25 | 31 | 15 | 64 | 14 | 17 |  |  |  |  |  |  |  |  | 100 | 83， 000 | 258 |
| Bapt | 2 | 1 | 25 | 16 | ， | 0 |  |  |  |  | － | 0 |  | 0 | 4 | 0 |  | \％\％，000 | 259 |
| Nonsec | 0 | 3 | 10 | 28 | 18 | 17 | 0 | ～ | 2 | 3 | ， | 3 |  | 3 |  |  | 500 | 6，000 | 260 |
| Bapt | 1 | 1 | 40 | 20 | 35 | 40 | 2 |  |  |  | ， |  |  | 2 | 4 | 0 | 150 | 12，500 | 251 |
| Nonsect | 2 | 3 | 6 | 17 | 59 | 63 | 8 |  |  |  | 1 | 1 |  |  |  |  | 2，000 | 8，000 | 26.3 |
| Nonsect | 1 | 2 | 41 | 55 | 60 | 74 | 1 ＊ |  |  | 3 |  |  |  |  | 4 | 0 | 450 | 26，000 | 263 |
| Nonsect ． | 1 | 2 | 0 | 45 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | － | 20，000 | 264 |
| R．U．－．－．． | 0 | 4 | 4 | 13 | 22 | 27 |  |  |  |  | 0 | 0 |  | 0 |  | 0 | 500 | 10，000 | 265 |
| Nonsect ．－ | 1 | 1 | 35 | 24 | 6 | 16 | 8 | 0 | 10 |  | 0 | 2 | 4 |  |  |  |  | 5，000 | 266 |
| Nonsect | 1 | 0 | 20 | 0 | 10 | 0 | 0 | 0 | 10 | （ | 0 | 0 | 0 | 0 | 4 | 0 | 150 |  | 297 |
| Nonsect | 1 | 1 | 25 | 11 | 20 | 30 |  |  |  |  |  |  |  |  |  |  |  | 450 | 268 |
| Presb | 5 | 12 | 0 | 59 | 0 | 184 | 0 | 39 |  |  | ， | 6 | O | 0 | 4 | 0 | 1，500 | 120，000 | 269 |
| Presb－．．．－ | 2 | 0 | 25 | 0 | 51 | 0 | 25 | 0 | 25 | 0 | 2 | 0 | ， | 0 | 3 | 0 | 700 | 10，000 | 270 |
| Nonsect ． | 2 | 0 | 27 | 8 | 0 | 0 |  | － |  | － | 4 |  |  |  | 3 | 0 | 60 | 1，500 | $2 \% 1$ |
| Nonsect | 2 | 0 | 82 | 28 | 70 | 77 | 8 | 17 | 3 | 8 | 0 | 5 |  |  | 3 |  |  | 5，500 | $2 \% 2$ |
| M．E．So | 1 | 2 | 70 | 70 | 53 | 47 | 5 | 0 | 0 | 0 | 2 | 2 | 1 | 0 |  |  |  | 5，000 | $2 \% 3$ |
| Nonsect | 1 | 4 | 55 | 50 | 85 | 65 | 10 | 12 |  |  | 2 | 5 | 2 |  | 5 | 55 | 800 | 12，000 | 274 |
| Nonsect | 1 | 0 | 20 | 33 | 53 | 41 | 20 | 33 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 50 | 3，000 | 275 |
| Nonsect－ | 1 | 1 | 30 | 24. | 13 | 27 | 4 | 16 |  |  |  |  |  |  |  |  |  | 3， 000 | 276 |
| Nonsect． | 1 | 1 | 4 | $\cdots$ | 31 | 38 |  |  | 1 | 2 | ， | 0 | 1 | 0 | 3 |  | 300 | 1，509 | 277 |
| Nonsect | 1 | 1 | 4 | ＊ | 46 | 41 | 4 | 3 | 0 |  |  |  |  |  |  |  |  | 1，500 | 278 |
| Nonsect－ | 2 | 2 | 79 | 78 | $1: 6$ | 131 | 79 | $7 \%$ |  |  |  |  |  |  | 4 |  | 300 |  | 2\％9 |
| Bapt ．－．．．． | 0 | 2 | 0 | 185 | 0 | 0 |  |  |  |  |  |  |  |  |  | 0 | 200 | 1，000 | 280 |
| Nonsect ．－ | 1 | 0 | 10 | 15 | 12 | 20 | 0 | 0 | 1 |  |  |  |  |  | 1 | 0 | 0 | 500 | 281 |
| Nonsect－ | 2 | 1 | 40 | 59 | 15 | 50 | 25 | 30 | 2 | 3 | 1 | 1 | 1 | 1 | 4 | （） | 600 | 20，009 | $28 \%$ |
| Nonsect | 1 | 1 | 50 | 25 | 50 | 50 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 10，000 | 283 |
| Nonsect | 1 | 0 | 43 | 0 | 40 | 0 | 10 | 0 |  |  | 0 | 0 | 0 | 0 | 4 | 43 | 0 | 1，500 | 284 |
| Nonsect | 1 | 1 | 15 | 19 | 36 | 39 |  |  |  |  | 0 | ， | 0 | ， |  |  | 500 | 5， 000 | 235 |
| Cong | 1 | 3 | 26 | 20 | 159 | 176 | 3 | 0 | 0 | ， | ， | ， |  | ， | 5 | 0 | 700 | 8，090 | 286 |
| Meth | 1 | 4 | 30 | 35 | 120 | 139 | ， | 1 | ， | ， | 1 | 1 |  | 1 |  |  | 700 | 20，000 | 287 |
| Cong＇ | 1 | 3 | 20 | 56 | 120 | $3: 3$ | 1 | 0 |  |  | 1 | 6 |  |  | 5 | 0 | 2，000 | 40，000 | 288 |
| Bapt ．．．．．－ | 2 | 0 | 5 | 13 | 63 | $69$ | 1： | 20 | 3 | 1 | 0 |  | 0 |  | 4 | 0 | － 40 | 15，000 | 289 |
| R．C－－．．－－ | 3 | 0 | 19 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 |  |  | 3 | 0 | 5，000 |  | 200 |
| Nonsect－－ | 2 | 0 | 49 | 56 | 182 | 191 |  |  |  |  |  |  |  |  |  |  |  |  | 291 |
| NTonsect ．－ | 1 | 1 | 14 | 31 | 36 | 19 |  |  |  |  |  |  |  |  |  |  |  |  | 292 |
| M．E．－．．．．． | 2 | 0 | 30 | 25 | 82 | 81 | 2 | 3 | 2 | 1 |  |  |  |  |  | 3 | 25 | 4，000 | 293 |
| Nonsect－－ | 1 | 1 | 8 | 7 | 37 | $23$ |  |  |  |  |  |  |  |  |  |  | 0 | ${ }^{400}$ | 294 |
| Nonsect ．－ | 2 | 2 | 20 | 15 | 20 | 33 | 3 | 4 |  |  |  |  |  |  | 4 | 25 | 100 | 3,000 | 205 |
| Nonsect． | 1 | 2 | 19 | 17 | $5 \%$ | 63 | 3 |  |  |  | 1 |  |  |  |  | 0 | 200 | 3， 000 | 296 |
| Meth．（So．） | 2 | 1 | 35 | 35 | 115 | 142 | 4 | 1 |  |  |  |  |  |  |  | 0 | 400 | 10，000 | $\stackrel{297}{ }$ |
| Nonsect．．． | 1 | 0 | 21 | 15 | 70 | 85 | 4 | 3 |  |  |  |  |  |  |  |  |  | 5，000 | 238 |
| Cong－－－－－ | 1 | 1 | 9 | 34 | 96 | 181 |  |  | 2 | 4 | 3 |  | ） | 0 | 2 | 0 | 500 | 5，000 | 239 |
| Nonsect．－－ | 1 | 0 | 9 | 0 | 21 | 0 | 5 | 0 | 4 | 0 | 1 | 0 | 1 | 9 | 4 | 0 | 500 | 12，000 | 300 |
| Nonsect． | 1 | 0 | 20 | 18 | 40 | 30 | 0 | 5 |  |  | 3 | 7 | 0 | 5 | 4 |  |  | 1，200 | 301 |
| Nonsect．－ | 1 | 2 | 33 | 40 | 42 | 60 | 6 | 4 | 2 | 1 | $\stackrel{2}{2}$ | 3 | 2 | 3 | 4 |  | 300 | 3， 000 | 303 |
| Nonsect．－ | 1 | 2 | 21 | 17 | 25 | 27 | 2 | 0 | 1 | 0 | 2 | 1 | 2 | 1 |  |  |  | 5，000 | 303 |
| Nonsect－． | 0 | 1 | 17 | 27 | 4．2 | 53 |  |  |  |  |  |  |  |  |  |  |  |  | 304 305 |
| Nonsect－ | 1 | 1 | 11 | 18 | 100 | 112 | 5 | 8 | 0 30 | O | 7 | 7 | 4 | 1 | 3 | 0 | 450 200 | 12，000 | 305 309 |
| Nonsect | 1 | 3 | 30 | 20 | 55 | 30 | 30 | 20 | 30 | 20 | 2 | 2 |  |  | 4 | 0 | 200 | 30，000 | 306 |
| Nonsect．－－ | 1 | 3 | 40 | 40 | 116 | 109 | 10 | 10 | 5 | 0 |  |  |  |  | 4 | 0 | 100 | 2，000 | 308 |
| Nonsect．．． | 1 | 1 | 8 | 11 |  |  |  |  |  |  | 2 | $\stackrel{2}{6}$ | 2 | $\stackrel{2}{6}$ | 2 |  | 150 500 | 4， 0000 | 308 |
| R．C | 0 |  | 0 | 30 | 0 | 45 | ！ | 10 | 0 | 10 | 0 | 6 | 0 | 6 | 4 | 0 0 | 500 | 12，000 | 309 310 |
| Nonsect． | 2 |  | 17 | 19 | 25 | 20 | 2 |  |  |  | 1 | 0 | 1 |  |  | 0 | 350 | 1，500 | 310 |
| Meth．． | 1 | 1 | 13 | 18 | 50 | 46 | 8 |  |  |  | 1 |  |  |  |  | 0 | 350 | 3，000 | 311 |

TABLE 43.-Statistics of priante high schools, endoued academies, seminaries,

and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

and other private secondary schools for the scholastic year 1899-1900--Contd.


Table 43. -Statistics of private high schools, endowed academies, seminaries,


* Statistics of 1808-99.
and other private secondary schools for the scholastic year 1899-1900-Contd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

and other privaie secondary schools for the scholastic year 1893-1900-Cont'd.


Thble 43.-Statistics of private high schools, endowed academies, seminaries,

|  | State and post-ofice. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
|  | EENTUCKY-cont'd. |  |  |
| 560 | Ver | The Ashland Se |  |
| 561 | Williamsburg | Williamsburg Academy | Herbert Haynes |
| 56.2 | Wilmore -...- | Asbury College .......... |  |
| 563 | Baldwin. | Gilbert Ácademy and Industrial College. | R. A. E. Albert, A. M. , D. D. |
| $56 \frac{1}{2}$ | Coringto | Dixon Academy .-.................. | William A. Di |
| 565 | Crowley | Acadia College * |  |
| 560 | .-.do | Beach's (Miss) School | Ellen P. Beach |
| 567 | Donaldsonvill | St. Vincent's Institute-....-.-. | Sisier M. Clotil |
| 568 | Franklinton | Franklinton Ceatral Institute.- |  |
| 569 | Gibsland | Gibsland Instituste.. | G.L. Wren |
| 570 | Grand Coteau | Sacred Heart Convent | Mother H. Sarens....-.-.....- |
| 571 | Harrisonburg ................... | Harrisouburg Figh School | A. W. Meadows .-. - .-. - - - - |
| 578 | Jackson ---- | Feliciana Institute | Rev. 1. O. Byers, A. M |
| 573 574 | --...do Marksville | Millwood Female Institute\%.... | Miss A. M. C. Pearce V.L. Rov, B. S |
| 575 | Monroe | St. Hyacinti's Boarding and Dáy School. | Sister St. Ignatius.------------- |
| 576 | Mount Lebanon | Mount Lebanon College*........ | J. Wolfe Carte |
| 577 | Mt. Zion | Mt. Cion Acadeny* ---.---...- | Y.E.Sutton |
| 578 | New Iberia ..---------- | Fasnacht's Mrs. Cixadedschool. |  |
| 579 | New Orleans (4521 St. Charles ave.). | Academy of the Sacred Heart..- | Medam E. Deighton |
| 580 | New Orleans ( $\mathbf{1} \% \sim_{\sim}^{\sim}$ Carondelet st.), | Dyker's's Institate .-------...-- | Miss Harriet V. Dylrers.-.-- |
| 581 | New Orleans (Dauphin and Reynes sts.). | Eoly Cross College................- | Rev.D.J.Spillard, C.S. C.--- |
| 58\% | New Orleans ( 1440 Camp st.). | Hone Institute ---.----.-------- | Sophia B. Wright.-.--------- |
| 583 | New Orleans (2003 Esplanadest.). |  | Mrs. E. Viarant |
| 584 | New Orleans (cor. Rampar'tand Esplanadests.). | St. Aloysius, College. .-....-. .-. | Brother Celestin |
| 585 | New Orleans .-.-............ | St. Joseph’s Commercial Academy. | Brother $\Lambda$ thanasius, F.S.C. |
| 586 | New Orleans (13:21 Annunciation st. ). | St. Simeon's School * | Sister Adelaide.-.----------- |
| 587 | New Orleans ( $\quad 018$ Coliseum st.). | Southern Acacemic Institute.-. | Mrs. Kate C. Seaman |
| 588 | New Orleans (19\%3 Coliseum st.). | University School* | T. W. Dyer. |
| 589 | New Orleans. .-.-----.-.-. | Ursuline Academy --------.------ | Mother St. Stanislaus, superioress. |
| 599 | New Roads | Poydras Academy -................ | Leo M. Favrot |
| 591 | Opelousas.---.---.-...---.-. | Academy of the Immaculate Conception. | Sister M. of St. Rose |
| $59 \%$ | Spearsville.-------........ | Everett Institute .-.-......-.-.-. - | Chas. A. Mathews |
| 593 | Athens - | Somerset A cademy . | L. C. Williams |
| 59.4 | Augusta | St. Catharine's Hall | Clare Von Weltberg |
| 595 | Bangor | English and Classical School.-.. | Miss Helen L. Newman..--- |
| 596 597 | Bethel | Gould's Academy ................- |  |
| 597 598 | Charleston | Bluehill (George Stevens' Acad- emy <br> Higgins Classical Institute | Charles W. Cutts ------ |
| 599 | Cherryfield | Cherryfield Academy --.-. | Benj. Coffin |
| 600 | Cumberland Center. | Greely Instituto ...... | Everett Peacock |

* Statistics of 1898-99.
and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,


[^133]and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,


[^134]and other private sccondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private ligh schools, endowed academies, seminaries,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | \% | 3 |
|  | MASSACHUSETTS-cont'd. |  |  |
| 693 | Bradford | Carleton School for Young Mens | Isaac N. Carleton, Pli. |
| 694 | Brighton | Mount St. Joseph's Academy | Sisters of St. Joseph |
| 695 | Brimfield .-............ | Hitchcock Free Academy | Wellington Hodgkins |
| 696 | Cambridge (\%Gardenst.) | Browne and Nichols School for Boys. | Geo. H. Browne, A. M., Edgar Li. Nichols, A. B. |
| $69 \%$ | Cambridge ( 3 and 36 Concord ave.). | The Cambridge School for Girls. | Arthur Gilman, A. M....-..- |
| 698 | Cambridge (9 Channing st. ). | The Lee School | Miss M. L. Kelly |
| 699 | Cambridge (13 Buckingham st). | Private School for Boys and Girls.* | Miss K. V. Smith |
| 760 | Canton - .-.-.-.............. | Sherman Hall .-...-....... | Miss Sarah W. Ames |
| 7018 | Canton Junction | The Norwood School | Wm. C. Langdon, A. M |
| 703 | - .-. do. | Wbite's (Miss) Home Schoo | Flora J. White |
| 704 | Danvers | The Willard Hall School | Eleanor J. Dawson |
| 705 | Deerfie | Deerfield Academy and Dickinson Hign School.* | Davia F. Carpenter |
| 703 | Dudley | Nichols Arademy and Dudley Hiph School. | Alfred G. Collins |
| 707 | Duxbury | The Alden School for Girls .... | Mary M. Fanning |
| \%08 |  | Partridge Academy ${ }^{\text {\% }}$ | Herbert E. Walio |
| 709 | ---do | Powder Point School | F. B. Kıapp |
| 710 | Easthampton | Williston Seminary- | Joseph H. Sawyer |
| 7112 | Ease Northfie <br> Everett | Northfield Seminary <br> Home School | Miss Evelyn 4 . Hall <br> Mrs. A. P. Potter |
| 713 | Fall Piver | Academy La Ste. Union des Sacre's Couis. | Sister Mary Aidan -.......... |
| ${ }^{7} 14$ | Franklin | Dean Academy. | Arthur W. Peirce, A. B |
| 715 | Great Barrington | Sedgwick Institute .-............ | Edward J. Van Lennep |
| 716 717 | Greenfield | Prospect Hill School for roung Women. <br> Groton School | Ida F.Foster and Caroline R. Clark. <br> Rev. Endicott Peabody |
| 717 718 | Groton. Hadley | Groton School ... <br> Hopkins Academy | Rev. Endicott Peabody Chester M. Grover .... |
| 719 | Haryard | Bromfield School | Lilla Frost. |
| 720 | Hatfield | Smith Academy * | Howard W.Dickinso |
| 721 | Hingham | Derby Academy | Mabel Cary Hawes. |
| 720 | Leicester | Leicester Academy | William E. Cate |
| 723 | Lowell . | The Rogers Hall School for | Elisa P. Uncerhil |
| 72. | Marion. | Tabor Academy | Dana M. Dustan. |
| ${ }_{2}$ | Merrimac | Whittier Home School | Annie B. Russell |
| 727 | Monson | Monson A cademy | James E. Butterwortio |
| ${ }^{\text {\% }}$ \% | Mount Hermon | Mount Eermon Boys' School | Henry F. Cutler- |
| 289 | Naticl | Walnut Hill School (Girls) | Clarlotte H. Conant, B. A., |
| 730 | New Beafora | Friends' Academy | Thomas H. Echfel |
| 731 | do | school for Boys and Girls (College Preparatory). | Charles E. E. Mosher |
| 73\% | Newburyport .. | Putnam Free School*. | Geo. A. Dickey |
| 733 | New Dorchester | Shawmut School --.----.---..-- | Ella G. Ives...... |
| ${ }_{7} 73$ | Newton | Newton Private School for Girls |  |
| ${ }_{7}^{735}$ |  | Preparatory School for Boys ${ }^{\text {Phe }}$ Mary A. Burnham School | Edward H. Cutler, A. M..... Miss B. T. Capez |
| 737 | Norton | Wher Girls. | Rev. Samuel V. Cole, D. D..- |
| 738 | Pittsfiel | The Berkshire school -.......... | Arthur J. Clough, A. M....- |
| 739 740 | Quincy | Hall's (Miss) School for Girls* -. | Mira H. Hall. |
| 740 | Quincy | Adams Academy | Wm. Everett, LL. D.......... |

*Statistics of 1898-99.
and other privaie secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,


* Statistics 1898-49.
and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,


[^135]and other private secondary schools for the scholastic year 1899-1900-Contd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

and other private secondary schools for the scholastic year 1893－1900—Contd．

| Religions denomina－ tion． | $\begin{gathered} \text { Sec- } \\ \text { ond- } \\ \text { ary } \\ \text { in- } \\ \text { struct- } \\ \text { ors. } \end{gathered}$ |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { Second- } \\ & \text { ary } \\ & \text { stu- } \\ & \text { dents. } \end{aligned}$ |  | Ele－ <br> men－ <br> tary <br> stri－ <br> dents． |  | Preparing for college． |  |  |  | Gradu－ ates in 1900. |  | College prepar－ atory students in the class that gradu－ ated in 1800. |  |  |  |  |  |  |
|  |  |  | Clas－ sical course． | Scien－ tific course． |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \stackrel{9}{\mathrm{~N}} \\ & \underset{\sim}{\mathrm{~N}} \end{aligned}$ | $\begin{gathered} \dot{0} \\ \text { ज్g } \\ \text { む } \\ \mathbb{E} \end{gathered}$ |  |  |  |  |  |  | 宛 |  | $\stackrel{\dot{9}}{\stackrel{\text { 玉 }}{\sim}}$ |  | $\begin{aligned} & \text { 品 } \\ & \text { 蓇 } \end{aligned}$ |  |  |  |  |  |  |  |  |
| 4 | 5 | 6 | \％ | 8 |  |  | 9 | （1） | 建道 | 12 | 18 | 14 | 显可 | $1{ }^{6}$ | 复 7 | $1{ }^{1} 8$ | 是 9 | （80 | 3月 | 689 |  |
| Nonsect | 1 | 0 | 9 | 8 | 65 | 47 | 5 | 1 |  |  |  |  |  |  |  | 0 | 600 | \＄1， 800 | 837 |
| Nonsec | 1 | 3 | 23 | 41 | 17 | 19 | 5 | 0 | 1.5 | 23 |  |  |  |  |  | 0 | 1，000 | 20， 000 | 838 |
| Presb． | 1 | 8 | 0 | 60 | 0 | 40 |  |  |  |  | 0 | 5 |  |  |  |  | 500 | 20， 000 | 839 |
| Nonsect．－ | 5 | 0 | 38 | 0 | 66 | 0 |  |  |  |  | ］ |  |  |  | 4 |  |  | 3，000 | 840 |
| Cong ．－．．．．． | 0 | 8 | 69 | 40 | 100 | 100 | ， |  |  | 6 | 6 |  |  | 6 |  | 0 | 300 | 4，500 | 841 |
| Nonsect．．－ | 1 | 1 | 16 | 14 | 0 | 0 | 1 |  |  |  | 4 | 3 | 1 | 1 | 3 | 0 | 300 |  | 84.2 |
| Meth | 2 | 0 | 10 | 0 | 73 | 60 | 4 | 0 | 2 | 0 |  |  | 0 | 0 |  | 0 |  | 1，000 | 843 |
| R． $\mathrm{R}^{\text {P }}$ | 4 | － 0 | 20 | 0 | 154 | 0 | 10 | 0 |  |  |  | 0 |  |  | 3 | 0 |  | 30，000 | 844 |
| R．C | 0 | － 2 | 0 | 15 | 0 | 110 |  |  |  |  |  |  |  |  | 3 |  |  |  | 845 |
| Nonsect | 1 | 1 | 80 | 65 | 20 | 10 | 12 | 9 | 21 | 18 |  |  |  |  |  | ， | 600 | 3,500 | 816 |
| Nonsect． | 1 | 0 | 17 | 21 | 26 | 23 | 1 | 5 |  |  | 0 |  |  | 4 |  |  | 0 |  | $84^{*}$ |
| Nonsect． | 1 | 2 | $2 \sim$ | 33 | ？ 1 | 81 | 8 | 9 | 8 |  |  |  |  |  |  | 0 | 0 | 1，000 | 818 |
| Nonsect． | 1 | 1.0 | 10 | 20 | 25 | 20 |  |  | 2 |  | 0 |  |  |  | 4 | 0 |  | 1，500 | 849 |
| Nonsect | 0 | ） 2 | 0 | 20 | 0 | 75 |  |  | 0 | 15 | 0 |  | 0 | 1 | ， | 0 | 250 | 6，500 | 850 |
| Nonsect | 1 | 1 | 29 | 201 | $3:$ | 28 | 8 | 3 | 2 | 0 | 0 |  |  |  | 3 | 0 | 300 | 2，800 | 851 |
| Nonsect | 2 | 2.1 | 38 | 59 | 29 | $2:$ | 13 |  |  |  |  |  |  |  |  | 28 |  | 3，000 | 85.2 |
| Nonsect | 2 | －1 | 29 | 19 | 40 | 20 | 0 | 0 | 5 | 1 |  |  |  |  | 3 |  |  | 600 | 853 |
| Nonsect | 2 | 1 | 50 | 55 | 6i． | \％$\%$ | 18 | 15 | 23 | 2 | 6 | 4 | 3 |  |  | 0 | 500 | 3，000 | 854 |
| Nonsect． | 1 | 12 | 6 | 8 | 36 | 38 | ， | 2 | 1 |  |  |  |  |  |  | A | 200 | 1，000 | 855 |
| Nonsect | 1 | 1 | 10 | 6 | \％ | 14 | ， | 1 |  |  |  | 3 | 2 | 3 |  | 0 |  | 2，000 | 859 |
| Nonsect． | 0 | 1 | 29 | 20 | 55 | 89 | 6 | 4 |  |  |  |  |  |  | 6 |  |  | 2，000 | 857 |
| Presb | ， | \％ | 0 | 36 | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 8 | 0 |  | 5 | 0 | 500 | 40，000 | 853 |
| Nonsec | 1 | 1 | 40 | 25 | 50 | 4： | 5 | 3 | 21 | 10 | 16 |  | 8 | 5 |  | ， | 800 | 2，000 | 859 |
| P．C ． | 0 | ） 2 | 0 | 23 | 0 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 850 |
| Nonsect． |  |  | 69 | 73 | 0 | 0 |  |  |  |  | 2 | 6 |  |  |  |  | 450 | 3，5c0 | 881 |
| Nonsect | 1 | 2 | 16 | 15 | 2 | 6 | 1 | 0 |  |  | 0 | 0 | 0 | 0 | 3 | 0 | 1，500 | 1，100 | $86 \%$ |
| Nonsect． | 5 | 5 | 40 | 0 | 15 | 0 | 0 | 0 | 3 | 0 | 6 | 0 | 3 |  | 4 | 40 | 2，500 | 60， 000 | 863 |
| Nonsect | 0 | 5 | 0 | 30 | 0 | 0 | 0 | 4 | 0 | $\stackrel{4}{4}$ | 0 |  | 0 | 1 |  | 0 | 500 | 15，000 | 864 |
| Presb－－ | $\%$ | 2 | 21 | 25 | 40 | 48 | 6 | 5 | 4 | 2 |  | 5 |  |  | ， | －－40 | 500 | 18，500 | 865 |
| Nonsect | $\stackrel{2}{2}$ | 4 | 40 | 37 | 5 | 6 | 1 | 2 | 3 | 5 | 1 | 3 | 1 | 2 | 4 | 40 | 800 | 10，（00） | 856 |
| M．E．So－ |  | 0 | 16 | 21 | 24 | 40 |  |  |  |  | \％ |  |  |  | 3 | 0 | 250 | 10，000 | 867 |
| Nonsect．－－ | 2 | －1 | 42 | 0 | 5 | 0 | 2 | 0 | 2 | 0 | 3 | 0 | 1 | 0 | 4 | 42 | － 500 |  | 868 |
| Christian． |  |  | 0 | 109 | 0 | 0 | 0 |  |  |  |  |  |  |  | 4 |  | 1，200 | 25，000 | 869 |
| Presb | 3 | 31 | 33 | 10 | 51 | 44 | 3 | 1 | 5 | 0 | 1 | 5 |  |  |  | 6 | 1，009 | 3），000 | 870 |
| R．C． | 0 | a 4 | 0 | 20 | 0 | 40 | 0 | 2 | 0 | 2 | 0 | 0 |  | 0 | 4 | 0 | 84 |  | 871 |
| M．F．So | 0 | ） 1 | 48 | 68 | 12 | 15 |  |  |  |  | 1 |  |  |  | ， | 0 | 300 | 20， 000 | 872 |
| Nonsect | 1 | 11 | 16 | 16 | 20 | 21 |  |  |  |  |  | 1 |  |  | 4 | 30 | 100 | 3，000 | 873 |
| Nonsect． | 3 | 31 | 30 | 0 | 10 | 0 |  |  | 10 | 0 | 3 |  |  | 0 | 4 | 21 | 1，000 | 10，000 | 874 |
| R．C | 14 | 4 （ | 57 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 300 |  | 875 |
| Ev．Luth | 4 | 40 | 40 | 0 | 0 | 0 | 20 | 0 | 20 | 0 | 7 | 0 |  | 0 | 3 | 0 | 600 | 2）， 000 | 876 |
| Nonsect．－－ | 2 | 20 | 13 | 12 | 30 | 35 |  |  |  |  | 4 | 4 |  | ， |  | 0 | 400 | 3，500 | 877 |
| Nonsect．－． | 1 | $1{ }^{2}$ | 6 | 20 | 6 | 14 | 2 |  | 0 | 0 | 0 | 2 |  |  |  |  | 400 | 5，000 | 878 |
| M．E． | 6 | 4 | 63 | 41 | 0 | 0 | 21 | $13$ |  | 2 | 4 | 5 |  |  |  | 0 | 900 50 | 2， 500 | 879 |
| Bapt－ | 2 | $2{ }^{1}$ | 30 | 27 | 10 | 12 | $\stackrel{2}{2}$ | 0 | 4 | 3 |  |  |  |  | 4 |  | $\begin{array}{r}50 \\ \hline 1.300\end{array}$ | 10,000 30,000 | 880 |
| M．E．So－－ | 3 | 3 3 | 60 | 50 | 10 | 15 | 2 | $\stackrel{0}{0}$ | 5 | $\stackrel{\square}{*}$ | 4 | 2 |  |  | 4 |  | 1，200 | 30，000 | 881 |
| Christian | 0 | 03 | 0 | 60 | 0 | $7 \%$ | 0 | 17 | 0 |  | 0 | 15 |  |  |  |  |  | 40，000 | $88 \%$ 883 |
| Bapt－－－－－ | 6 4 | $\begin{array}{ll}6 & \\ 4 & \\ \\ \end{array}$ | 60 45 | 60 | 30 0 | 40 | 35 | 40 | 30 | 19 | 6 |  |  |  | 4 |  | 2，000 | 35， 000 | 883 |
| R．C．－－－．．－ |  | 4 | 48 | 20 | 20 | 10 | 4 |  |  |  | 8 | 10 |  |  |  |  |  | 2，000 | 885 |
| R．C．．．．．．． |  | 0 | r | 18 | 25 | 53 |  |  |  |  |  | 1 |  |  |  | 1 | 500 | 2， | 886 |

Table 43.-Statistics of private high schools, endowed academies, seminaries,

|  | State and post-ofice. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | ${ }^{1}$ | 3 |
|  | missouri-continued. |  |  |
| 887 | Humphreys | Humplureys Academy and Busi- | L. H. Gehman |
| 888 | Iber | Iberia Academy | G. Byron Smith |
| 889 | Independenc | Woodland College | Geo. S. Bryant |
| 880 | Jackson | Carlisle Training School | Willis Carlisle |
| 892 | Kansas City | Institute of our Lady of merc <br> St. Teressa's Academy .-...... | Sister Mary Antonia |
| 893 | Kidder-..... | Kidicər Institute...... | George W. Shaw ... |
| $89 \pm$ | Kirkwood | Kirkwood Military Academy | Edward A. Haight |
| 895 | Labaddie | Labaddie Academy * | Louis C. Knowlton |
| 880 | Laddonia | Collins Seminary .- | E. A. Collins. |
| 897 | Lexington | Wentworth Military Academy . | Sanford Sellers |
| 898 | Macon | Blees Military Academy -- | F. W. Blees (Col.) |
| 899 | Marionvi | Marionville Collegiate Institute | Lewis Grant Leser, pres |
| 901 | Maryville | Sharyville Seminary | Chas. O. Nills, president |
| 902 | Mechanicsville | Howell Institute. | George E. Miller .-. |
| 903 | Mindle Grove | Middle Grove College ---........- | W. Moore Jones, president |
| 904 | Moberly | St. Mary's Academy off the Sisters of Loretto. | Sister Caroline |
| 905 | Moundville ... | Cooper College. | C. H. Miles president |
| $9 \%$ | Mount Vernon | Mount Vernon Academy * | Elizabeth Parik |
| 907 | OTFallon | Woodlawn Institute | Rev. W. 'T. Howison, A. M |
| 908 | Pierce City | Pierce City Baptist College | Errest W. Dow, Ph. D..... |
| 910 | Platte City | Gaylord Institute*.. | Mrs. 7. W. Pariz |
| 911 | Plattsburg | Plattsburg College | S. Z. Sharp, A.M |
| 912 | Powersvill | York Seminary --..-- | Charles R. Bowan |
| 913 914 | Rensselaer | Van Rensselaer Academy | Wm. R. Anderson, jr |
| 14 915 | St. Charles. | Woodson Institute --.- | A. C. Shelton |
| 916 | St. Joseph. | -...do......-.......-.-.-......- | Madame M. Vernier |
| 917 | St. Louis. | Academy of the Visitation | Sister Aquin Martin |
| 918 | St.Louis (1607-17 Compton aye.). | Bishop Mobertson Hall .-.-. .-... | Sister Catharine, superior |
| 919 | St. Louis (4:93 Washington st.). | Hosmer Hall | Miss Martha H. Mathews |
| 920 | St. Louis (2345 Pine st.) - . | Loretto Academy -- | Sister M. Reparata |
| ${ }_{922} 92$ | St. Louis $\qquad$ | The Mary Institute | Edmund H. Sears |
| 923 | St. Luuis (Washingt on | Smith Academy*. | Charles P. Curd |
| 924 | Sti. Louis (South 1eth st.) - | Ursuline Academy and Day School. | Mother Seraphine. |
| 925 | St. Louis (1033 South 8th st.) | Walther College .-...... | August C. Burgdorf |
| 926 | Salisbury | North Missouri Academy | G. C. Briggs |
| ${ }_{92} 9$ | Sodalia St. | George R. Smith Collegg ........ | Rev.E.A. Robertson, II. A |
| 929 | Springfield | Loretto Academy - .-...........-. | Sister M. Wilhrid La Mote |
| 930 | Spring Garden | Miller County institute | J. Ivy Lumpkin |
| 931 | Sweet Springs | Sweet Springs Academy | J.E. Barnett |
| ${ }_{933}^{932}$ | Troy | Buchanan College | E. H. Lay, A. B. |
| 934 | Webb City | Webb City Academy ........ | Victor E. Harlow ... |
| 935 | West Plain | West Plains College .-......... | J.T.Outen....... |
|  | montana. |  |  |
| 936 | Deerlodgo | St. Vincent's Academy --.---...- | Sister Anacleta |
| 937 938 | Missoula | Sacred Heart Academy .-....... | Sister Hilarion ${ }_{\text {Sister Mary Cecilia }}$ |
|  |  | * Statistics of 1898-99. |  |

and other private secondary schools for the scholastic year 1899－1900－Cont＇d．

| Religious denomina－ tion． | Sec－ond－aryin－stract－ors． |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | ```Second- ary stu- dents.``` |  | Ele－ <br> men－ <br> tary stu－ dents． |  | Preparing for college． |  |  |  | Gradu－ ates in 1900. |  | College prepar－ atory scudents in the class that gradu－ ated in 1900. |  |  |  |  |  |  |
|  |  |  | Clas－ <br> sical course． | $\begin{aligned} & \text { Scien- } \\ & \text { tific } \\ & \text { cour'se. } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | $\frac{\dot{Q}}{\underset{F}{\dddot{y}}}$ |  | $\stackrel{\dot{9}}{\stackrel{\text { H }}{4}}$ |  |  |  |  |  | 急 | $\begin{aligned} & \dot{9} \\ & \text { 玉్ } \\ & \text { g్d } \\ & \text { En } \end{aligned}$ |  |  |  |  | $\begin{gathered} \dot{\oplus} \\ \stackrel{y}{n} \\ \underset{A}{n} \end{gathered}$ |  |  |
| 4 | 5 | 6 | 7 | 8 |  |  | （9） | 19 | 11 | 18 | 13 | 景 | 13 | 16 | 18 | 18 | 15 | 23 | 28 | 888 |  |
| M．E．So | 3 |  | 105 | 0 | 0 | 0 |  |  |  |  | 3 | 4 | 3 |  | 4 |  | 300 | \＄10，0c0 | $88 \%$ |
| Cong | 1 | 5 | 55 | 00 | 0 | $\theta$ | 6 | 6 | 5 | 5 | 。 | 4 | 2 | $t$ | 4 |  | 2，000 | 5， 000 | 888 |
| Christian－ | 1 | 13 | 16 | 22 | 10 | 5 |  |  |  |  | 8 | 8 |  |  | 4 | 0 | 1，200 | 15，090 | 889 |
| Nonsect | 3 | 0 | 43 | 18 | 10 | 15 |  |  |  |  | 1 | 0 |  |  | 4 |  | 400 | 11，060 | 890 |
| R．C | 0 | － 1 | 0 | 15 | 0 | 98 | 0 | 6 | 0 | ， | 0 | 0 |  |  | 4 | 0 | 250 | 40，000 | 891 |
| R．C | 0 | － 3 | 0 | 25 | 0 | 220 |  |  | 0 | 13 | ， | 6 |  |  | ， |  | 300 |  | 892 |
| Cong ．－． | 4 | － 2 | 43 | 47 | ${ }^{7}$ | 17 | 10 | 12 | 20 | 25 | 6 | 12 | 2 | 8 | 4 | 0 | 1，500 | 20，200 | 893 |
| Nonsect | 4 | 0 | 21 | 0 | 30 | 0 |  | 0 | ， | 0 | 5 | 0 |  |  | 4 | 24 | 500 | 25，200 | 831 |
| Nonsect | 1 | 0 | \％ | 9 | 9 | 10 |  |  |  |  | 0 | 2 |  |  |  |  |  |  | 805 |
| Nonsect | 1 | 1 | 15 | 15 | 2 | 4 | 12 | 13 |  |  | 0 | 0 |  |  |  | 0 | 800 | 3，00\％ | 896 |
| Nonsect | 8 | 0 | 100 | 0 | 11 | 0 | 14 | 0 | 22 | 0 |  | 0 | ， | 0 | 3 | 100 | 1，200 | 50， 000 | 897 |
| Nonsec | 14 | 0 | 70 | 0 | 15 | 0 | d | 0 | 3 | 0 | 4 | 0 | 1 | 0 | 4 | 70 | 1，000 | 500， 000 | 898 |
| M．E | 4 | －${ }^{\text {B }}$ | 45 | 22 | 30 | 62 | 5 | 1 | 18 | 10 | 5 | 2 | 5 | 2 | 4 | 0 |  | 12，000 | 898 |
| R．C | 0 | ） 2 | 0 | 13 | 12 | 53 |  |  | 0 | 2 |  |  |  |  | ， | 0 | 100 | 12，000 | 900 |
| M．E | 4 | 6 | 66 | 63 | 0 | 0 | 20 | 20 | 25 | 10 | 9 | 5 | 6 | 4 | 4 |  | 240 | 20，060 | 901 |
| Nonsect． | 1 | 0 | 3 | 10 | \％ | 2 | ， | （1） | 0 | 0 |  | 0 | 0 | 0 | 3 | 0 | 100 | 2，000 | 902 |
| Nonsect．－－ | 0 | 1 | 12 | 8 | 4 | 6 | ， | 0 | 0 | 1 |  | 0 | 3 | 0 | 3 | 0 | 200 | 2，000 | 903 |
| R．C． | 1 | 3 | 25 | 25 | 30 | 25 |  |  |  |  |  |  |  |  |  |  | 300 |  | 904 |
| Nonsect | 3 | 0 | 21 | 33 | 18 | 23 | 6 | 8 | 18 | 23 | 1 | 3 | 2 | 3 | 3 | 0 | 200 | 7，000 | 905 |
| Presb | 0 | － 2 | 10 | 10 | 4 | 2 |  |  | 0 | 2 | 1 | 1 |  |  | 4 |  | 10 | 700 | 905 |
| Presb | 1 | ． 6 | 11 | 26 | 2 | 1 | 5 | 19 |  |  | ， | 2 | 1 | 2 | 4 | 0 | 310 | 6，000 | 907 |
| Bapt | 4 | 4 | 84 | 12 |  |  |  |  |  |  | 1 | 0 |  |  | 4 |  | 700 | 20，000 | 808 |
| Nonsect． | $\stackrel{2}{2}$ | 1 | 18 | 21 | 20 | 25 |  |  |  |  | 2 | 3 |  |  |  |  |  |  | 909 |
| Nonsect． | 0 | 2 | 7 | 10 | 9 | 19 |  |  |  |  |  |  |  |  | 4 |  | 600 | 25， 000 | 910 |
| Gr．Bapt | 4 | 1 | 22 | 40 | 9 | 5 | 2 |  | 3 | 5 | 2 | 2 |  |  | 4 | 0 | 750 | 10，000 | 911 |
| Nonsect． | 1 | 1 | 10 | 11 | 5 | 1 | 4 |  |  |  |  |  |  |  |  |  |  |  | 919 |
| Presb | 1 | 0 | 16 | 5 | 0 | 0 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |  | 0 | 1，000 | 913 |
| M．E．So | 2 | 1 | 30 | 32 | 20 | 23 |  |  |  |  | 6 | 0 |  |  |  |  |  | 35， 000 | 914 |
| R．C． | 1 | 3 | 0 | 40 | 0 | 10 | 0 | 11 | 0 | 18 | 0 | 4. | 0 | 4 |  | 0 | 700 | 10，000 | 915 |
| R．C | 0 | 10 | 0 | 50 | 0 | 37 |  |  |  |  | 0 | 1 |  |  | 5 |  | 2，000 |  | 916 |
| R．C | 0 | 16 | 0 | $9 \pm$ | 0 | 66 |  |  |  |  |  | 10 |  |  |  |  |  | 350,000 | 017 |
| Epis．－－ |  | 8 | ， | 39 | 1 | 44 | 0 | 0 | 0 | 1 | 0 | 7 | 0 | 1 | 4 | 0 | 3，060 | 70，000 | 918 |
| Nonsect．． | 0 | 5 | 0 | 52 | 0 | 104 | 0 |  | 0 | 6 | 0 | 11 | 0 | 1 |  |  | 460 |  | 919 |
| R．C．．．．．．－ | 0 | 4 | 0 | 9 | 0 | 81 |  |  |  |  | 0 | 1 |  |  | 4 | 0 | 4，009 |  | 920 |
| Nonsect．－． | 0 | 18 | 0 | 287 | 0 | 131 | 0 | 45 |  |  | 0 | 39 | 0 | 8 | 5 |  | 1，300 | 10，00 | $9 \% 1$ |
| Nonsect．．． | 2 | 1 | 19 | 31 | 7 | 0 |  |  |  |  | 2 | 0 | 2 | 0 | 4 |  |  | 25， 000 | 922 |
| Nonsect．－－ | 16 | 6 | 371 | 0 | 0 | 0 | 53 | 0 | 100 | 0 | 33 | 0 | 33 | 0 | 5 | 0 |  | 360,000 | $9 \% 3$ |
| R．C | 0 | 5 | － 0 | 10 | 12 | 230 |  |  |  |  | 0 | 1 |  |  | 4 | 0 | 1，2\％0 | 80，000 | 924 |
| Luth | 4 | 1 | 58 | 20 | 30 | 10 | $1 \hat{}$ | 0 | 20 | 1 | 13 | 5 |  |  | 4 | 0 | 450 | 60,000 | $9: 5$ |
| Nonsect． | 4 | 2 | 25 | 34 | 29 | 32 | 2 | 0 | 1 | 0 | 7 | 3 |  | 3 | 4 | 40 |  |  | 980 |
| M．E．．． | 3 | 4 | 20 | 31 | 40 | 60 | 5 | 3 | ${ }_{2}$ | 8 |  |  |  |  | 4 | 0 | 2，500 | 50， 000 | $9 \% 7$ |
| R．C | 0 | 7 | 0 | 34 | 0 | 38 |  |  |  |  | 0 | 4 |  |  | ， | 0 | 5， 047 |  | 988 |
| R．C | 0 | \％ | 0 | 45 | 0 | 70 | 0 | 10 |  | ， | 0 | 0 |  |  | ， |  | 992 | 20，000 | 929 |
| Nonsect． | 1 | 2 | 6 | 2 | 30 | 23 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 100 | 2，500 | 930 |
| Nonsect．．－ | 2 | 1 | 25 | 15 | 5 | 5 | 15 |  |  |  | 3 | 2 | 2 | 0 | 4 | 0 | 300 | 3，500 | 931 |
| Nonsect．．． | 2 | 2 | $3 \%$ | 42 | 35 | 27 | 2 | 0 | 2 | 1 | 1 | 2 | 1 |  |  | 0 | 100 | 12，000 | 932 |
| Christian－ | 3 | 0 | $\stackrel{2}{2}$ | 30 | 20 | $2 \pm$ | 0 | \％ | 7 | 6 | 3 | 2 | 2 | 2 | ， | 0 | 500 | 7，090 | 933 |
| Bapt－－－．－． | 2 | ｜ 4 | 34 | 41 | 31 | 44 | 5 | 3 | 5 | 0 | 0 | 2 | 0 | 0 | － | 0 | 800 | 85， 000 | 931 |
| Nonsect．－． | $\stackrel{3}{2}$ | － 1 | 30 | 30 | 12 | 8 | 13 | 10 |  | 7 | 0 | 0 | 0 | 0 | 5 | 0 | 400 | 6，000 | 935 |
| R．C | 0 | － 2 | 0 | 14 | 0 | 76 |  |  |  |  | 0 | 1 |  |  | 4 |  | 800 | 60， 000 | 935 |
| R．C | 0 | 3 | 0 | 18 | 106 | $19:$ | 0 |  | 0 | 0 | 0 | 3 | 0 | 1 | 3 | 0 | 230 | 69， 000 | 937 |
| R．C | 0. | ， | 0 | 34 |  | 326 | 0 |  |  |  | 0 | 5 | 0 | 5 | $\pm$ |  | 1，000 | 65， 000 | 938 |

Table 43.-Statistics of private high schools, endoued academies, seminaries,

*Statistics of 1898-99.
and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | \% | 3 |
|  | NEW JERSEY. |  |  |
| ${ }_{991}^{991}$ | Bayome City | School for Young Ladies | Misses Clarke an |
| 993 | Blairstown | Blair Presbyterial Academy | John C.Sharpe |
| 994 | Bordentown | Bordentown Military fnstitute. | Thompson H. La |
| 996 | do | School for Girls. | Alice G. Braislin. |
| 997 | Bridgeton | Ivy Hall School for Girl | Mrs. J. Allen Maxv |
| ${ }_{999}^{998}$ | do | South Jersey mistitute | Hhoebus W. Lyons |
| 1000 | Brielle | Gerlach Academy | D. Gerlach |
| ${ }_{1001}^{1002}$ | Burlington | St. Mar Rens ' Hall ${ }^{\text {S }}$ - | Miss Charlotte Tit |
| ${ }^{1003}$ | Deckertown------- | Seeley's Home School -... | W. H. Selley, A.M ${ }^{\text {H }}$ - |
| $100 \pm$ |  | East Orange School | H. Louise Underhill.......... |
| 1006 |  | Vail-Deane School. | Laura A. Vail |
| 1007 | Englewond | Colleriate School for Girls | Caroline M. Gerrish |
| 1009 | --...do ... | The Englewood School for Boys. | James B. Parsons, A. M. |
| 1010 | Fort Lee | Institute of the Hoiy Angels | Sister Mary Nonna |
| 1011 | Freehold Hacketstow | Freetiold Ladies Seminary*-... | Rev. C.H.W.Stocking .....- |
| 1013 | Hightstown - - ----..... | Peddie Institute | Poger W. Swetland, A. B. |
| 1014 | Hoboken (285 Washing- | Academy of Sacred Heart |  |
| 1015 | Hoboken (Willow ave. | Hohoken Academy | Heinrich Kaiser |
| 1016 | Hoboken (River and 6th | Stevens School | Rev.Edward Wall, A. M |
| 1017 | $\begin{aligned} & \text { sts.). } \\ & \text { Jersey City } \end{aligned}$ | Academy of St. Aloysirs | Sisters of Charity |
| 1019 | Jersey City Heights | German American Schooi | Carl A.Graupne |
| 1020 | Lakewood | The Lakewood School | Edward Park Harris, Ph |
| 1020 | Lawrencevilie | Lawrenceville School | E.T.Ferrington-.....-.-. |
| 10:3 | Long Branch | St. Mary's "Star of the Sea" | Sister M. Imelda. |
| 1024 | Montclair. | Montclair Military Academy ... | John G. MacVicar |
| 1025 | Moorestown |  | Wm. ${ }^{\text {cherles S Morman }}$ |
| 1027 | - Morristown. | Dana's (Niss) School for Giris.- | Miss E. Elizabeth Da |
| 1028 |  | Morris Academy | Harry W. Landfear |
| 1030 |  | Wyllie's (Miss) School | The Misses W ylli |
| 1031 | Newark (544 Highst.) | Newark Academy | Eamuel A. Farrand |
| 1032 | Newark (993 Broad st.) ...- | Newark Seminary for Young Ladies. | Miss Anna Frances Whitmore. |
| 1033 | Newark (21 Walnut st.)... | The Norwood School | Caroline B.Sergeant, Misses |
| 1034 | Newark (93 Washington | St. Mary's Academy. | Sister M. Catharine |
| ${ }_{1035}^{1035}$ | Newark (42Wailaceplace) | St. Vincent's Academy - |  |
| 1037 | New Brunswick (6ib Bay- | Townsend's(Miss) School Anable's (Misses) School. | Miss Anna P. Townsend <br> The Misses Anable ...... |
| 1038 | New Brunswick . .......... | Rutgers College Preparatory | Eliot R. Payson.. |
| 1039 | do | St. Agnes' Academy | Sister Mary Grace |

and other private secondary schools for the scholastic year 1899－1900．－Contd．

| Religious denomina－ tion． | Sec－ond－aryin－struct－ors． |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Second－ <br> ary stri－ dents． |  | Ele－ men－ tary strz－ dents． |  | Preparing for coilege． |  |  |  | Gradu－ ates in 1900. |  | College prepar－ atory studente in the class that giadu－ ated in 1900. |  |  |  |  |  |  |
|  |  |  | Clas－ <br> sical course． | $\begin{aligned} & \text { Scien- } \\ & \text { tific } \\ & \text { courge. } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | $\stackrel{9}{3}$ |  |  | $\begin{aligned} & \text { on } \\ & \text { cin } \\ & \text { dy } \\ & \text { fin } \end{aligned}$ | 汬 |  | $\begin{aligned} & \dot{9} \\ & \text { sun } \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & \dot{9} \\ & \text { gi } \\ & \text { gid } \\ & 0 \\ & 0 \end{aligned}$ |  |
| 4 | 5 | ${ }^{6}$ | g | 8 |  |  | （9） | 亚的 | 是直 | 14 | 13 | 14 | 15 | 36 | 县\％ | 夏8 | 198 | （3） | 188 | S8 |  |
| Nonsect | 0 | 3 | 0 | 10 | 0 | 11 | 0 | 1 | 0 | 0 | 0 | 0 | O | 0 |  |  | 1，000 |  | 991 |
| Nonsect ．－ | 1 | 3 | 12 | 40 | 49 | 48 | 0 | 2 | 2 | 2 | 1 | 10 | 0 | 0 | 3 | 0 |  | \＄20，000 | 998 |
| Presb－－－－ | 5 | 5 | 63 | 54 | 11 | 1 | 20 | 5 | 50 | 41 | 11 | 5 | 10 | 1 |  |  | 3， 000 | 200， 000 | 993 |
| Nonsectit－－ | 14 | 0 | 81 | 0 | 5 | 0 | 16 | 0 | 17 | 0 | 8 | 0 | $\stackrel{\sim}{1}$ | 0 | 4 | 81 |  |  | 994 |
| R．C． | 0 | 3 | 0 | 12 | 3 | 23 | 0 | 11 |  |  | 0 | 8 |  |  | 4 |  | 300 | \％5， 000 | 995 |
| Nonsect ．－ | 0 | 5 | 0 | 15 | 0 | 5 | 0 | 12 | 0 | 0 | 0 | 6 | 0 | 6 | 4 | 0 | 500 | 16，000 | 993 |
| Nonsect | 0 | 4 | 0 | 20 | 0 | 17 | 0 | 6 |  | － | 0 | 5 | ， | ， |  |  |  |  | 997 |
| Bapt ． | 5 | 6 | 30 | 54 | 8 | 0 |  |  |  |  | 5 | 4 |  |  | 4 | 84 | 3，500 | 100， 000 | 983 |
| Presb | 6 | 1 | 55 | 0 | 8 | 0 | 12 | 0 | 32 | 0 | 12 | 0 | 12 | 0 | 4 | 55 | 2，000 | 60，000 | 989 |
| Nonsect－－ | 3 | 0 | 20 | 0 | 14 | 0 | 8 | 0 | 0 | 0 | 16 | 0 | 6 | 0 | 4 | 20 | $18 \%$ | 28,000 | 1000 |
| P ． E | 0 | 13 | 0 | 47 | 0 | 13 | 0 | 5 | n | 2 | 0 | 19 | 0 | ＋ | 4 | 0 |  | 200，000 | 1001 |
| Presb | 0 | 3 | 7 | 8 | 10 | 5 |  |  |  |  | 1 | 3 |  |  |  | 0 |  |  | 1002 |
| Nonsect | 1 | 0 | 10 | 8 | 7 | 5 | 2 | 3 | ， | 0 |  |  |  |  | 4 | O |  | 8，000 | 1003 |
| Nonsect． | 2 | 7 | 0 | 21 | 20 | 20 | 0 | 2 | 2 | 2 | 0 | ， | 0 | 2 | 4 | 0 | 204 | 15，300 | 1094 |
| Nonsect ． | 8 | 0 | 55 | 0 | 52 | 0 | 12 | 0 | 35 | 0 | 7 | － | 7 | 0 | 5 | 0 | 200 | 40,000 | 1005 |
| Nonsect－－ | 1 | 9 | 0 | 53 | 1.2 | 50 | 0 | 1 | 0 | 7 | 0 | 11 | 0 | 3 | 4 | 0 | 801 | 3，010 | 1096 |
| Nonsect－－ | 0 | 5 | 0 | 40 | 0 | 10 | 0 | 10 |  | ， | 0 | 3 | 0 | 3 |  | 0 | 310 |  | $100 \%$ |
| Nonsect－ | 2 | 11 | 0 | 88 | 8 | 22 | 0 | 10 | 0 | 2 | 0 | 6 | 0 | 1. | 4 | 1 |  | 27， 000 | 1043 |
| Nonsect－ | 4. | 0 | 31 | 9 | 18 | 0 | 9 | 0 |  |  | 0 | 0 | 8 | 0 | 5 | 31 | 500 | 25， 060 | 1009 |
| R．C．．．．．． | 0 | 6 | 0 | 28 | 0 | 50 |  |  | 0 | 8 | 0 | 8 | 0 | 8 | 4 |  |  | 2，100 | 1016 |
| Nonsect－－ | 1 | 2 | 12 | 9 | 9 | 14 | 4 | 4 |  |  | 1 | 2 | 1 | 2 |  |  |  | 12，（00 | 1111 |
| M．Epis．． | 1 | 1 | $12 \%$ | 100 | 11. | 18 | 45 | r | 5 | 0 | 37 | 18 | 24 | 10 | 4 |  | 2,000 | 250,004 | 1012 |
| Bapt | 6 | 8 | 89 | 67 | 8 | 0 | 36 | 17 | 10 | 5 | 4 | 4 | 4 | 3 |  | 0 | 5． 200 | ¢50， 000 | 1013 |
| IU．C． | 0 | 10 | 0 | 130 | 0 | 0 | 0 | 130 |  |  |  |  |  |  |  |  | 1，100 |  | 1014 |
| Nonsect | 3 | 4 | 3\％ | 46 | 98 | 80 | 8 | 0 | 3 | 0 | 2 | 1 | 1 | 0 |  | 0 | 400 | 25， 000 | 1015 |
| Nonsect ．－ | 10 | 0 | 181 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 50 | 0 | 50 | 0 |  | 0 |  | 53， 1 12 | 1016 |
| R．C ．．．．．．． | 2 | 8 | 0 | 40 | 25 | 120 | 0 | 12 | ， | 13 | 0 | 34 | 0 | 4 | 4 | 0 | 500 | 77.400 | 1017 |
| Nonsect ．． | 8 | 7 | 80 | 75 | 40 | 35 | 40 | 20 | 10 | 2 | 6 | 11 | 6 | 5 |  |  | 590 | 100，000 | 1018 |
| Nonsect－ | 3 | 2 | 24 | 17 | 99 | 64 |  |  |  |  | 11 | ， |  |  |  |  | 316 | 10，000 | 1019 |
| Nonsect－ | 5 | 2 | 17 | 0 | 15 | 0 | 16 | 0 | 1 | 0 |  |  |  |  | 4 | 0 | －300 | 45， 000 | 1020 |
| Nonsect－ | 0 | 6 | 0 | 30 | 0 | 0 | 0 | 15 |  |  |  |  |  |  | ， | 0 | 3，000 |  | 1021 |
| Nonsect | 25 | 0 | 265 | 0 | 0 | 0 | 250 | 0 | 115 | 0 | 100 | 0 | 100 | 0 | 4 | 0 | 3， 900 |  | 1022 |
| P． C | 1 | 3 | 0 | 40 | 25 | 29 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 5 |  |  |  | 1023 |
| Nonsect | 6 | 0 | 45 | 0 | 48 | 0 | 8 | 0 | 22 | 0 | 7 | 0 | ， |  | 5 | 45 | 500 |  | 1024 |
| Friends ． | 1 | 1. | 16 | 16 | 42 | 48 | 2 | 2 |  | O | 0 | $\stackrel{0}{0}$ | 0 | 0 | 4 | 0 | 2，000 |  | 1005 |
| Friends－－－ | 1 | 3 | 12 | 17 | 41 | 37 | 1 | 6 | 1 | 0 | 2 | 5 | 1 | ， | 3 | 0 | 300 |  | 1026 |
| Nonsect ． | 0 | 17 | 0 | 113 | 0 | 30 | 0 | 10 |  |  | 0 | 9 |  |  |  | 0 |  |  | 10．27 |
| Nonsect－－ | 2 | 0 | 12 | 0 | 3 | 0 | 4 | 0 | （ | 0 | 0 | 0 | ， | 0 | 4 | 0 |  |  | 1023 |
| Ionsect－－ | 11 | 0 | 65 | 0 | 0 | 0 | 50 | 0 | 10 | 0 | 2 | 0 | ， | 0 | ， | 0 | 1，000 |  | 1099 |
| Nonsect．． | 0 | 3 | 0 | 10 | 10 | 20 | 0 | 6 |  |  |  |  |  |  |  |  |  |  | 1030 |
| Nonsect．．． | 13 | 0 | 185 | 0 | \％ 8 | 0 | 53 | 0 | 45 | 0 | 30 | 0 | 21 | 0 | 5 | 0 | 400 | 100，000 | 1031 |
| Nonsect． | 2 |  | 0 | 38 | 0 | 27 | （） | 4 |  | 2 | 0 | 1 | ， | 1 |  | 0 | 650 | 300 | 1032 |
| Nonsect̂．．－ | 1 | 6 | 0 | 22 | 0 | 20 |  |  | 0 | 1 | 0 | 4 |  |  | 4 |  |  |  | 1033 |
| P．C． | 0 | 3 | 0 | 44 | 0 | 55 | 0 | 44 |  |  | 0 | 0 | 0 | 0 |  |  |  |  | 1034 |
| P．C． | 2 |  | 0 | 30 | 35 | 35 |  |  |  |  | 0 | 5 |  |  | ， |  | 400 |  | 1035 |
| Nonsect． | 0 | －9 | 0 | 43 | 0 | 40 | 0 | 0 | 0 | 6 | 0 | 5 |  |  | 5 |  | 850 |  | 1036 |
| Nonsect | 1 | 6 | 2 | 15 | 3 | 25 | 2 | 15 |  |  | 0 | 2 | 0 | 2 | 4 |  | 1，000 | 20，000 | $103 \%$ |
| Nonsect．－－ | 5 |  | 84 |  | 43 | 25 | 4\％ | 11 | 37 | 9 | 25 |  | 25 |  | 5 | 42 |  |  | 1038 |
| R．C．．．．．．．－ |  |  |  |  |  | 270 | 11 |  |  |  |  |  |  |  | 2 | 40 | 550 | 50,000 | 1039 |

Table 43.--Statistics of private high schools, endowed academies, seminaries,

and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endoued academies, seminaries,

and other private secondary schools for the scholastic year 1899-1900-Contd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
|  | new york-continued. |  |  |
| $\begin{aligned} & 1129 \\ & 1130 \end{aligned}$ | Flushing -...... | Kyle Institute <br> Fort Edward Collegiate Insti- | Paul Kyle Joseph E King |
| 1131 | Fort Plain | Clinton Liberal Institute | William Cary Joslin |
| 1132 | Frankiin | Delaware Literary Institute | Eimer ${ }^{\text {er }}$ E. French |
| 1133 | Garden | St. Paul's Cathedral School | Frederick L. Gamage, |
| 36 | Geneva | DeLance School | Mary S.sma |
| ${ }_{1137}^{136}$ | Hamilton | Colgate Academy... | Frank L. Shepards |
| ${ }^{1138}$ | Hartwick | Hartwick Seminary | J. G. Traver, A. M |
| ${ }_{1139}^{1139}$ | Hempstead, | Hempstead Institute. | ${ }_{\text {Eper }}$ Epiraim Hinds, A |
| 1141 | Irvington-on-Hudson | Bennett's (Miss) School for Cirli S | May F. Bennett |
|  | Ithaca | Cascadilla School | C.V.Parsell |
| 1143 | ....do ..... | The University Preparatory School. | Charles D.stile |
| 1145 | Keeseville | McAuley Academ Golden Hill Scho | Sister M. Joseph |
| 1146 | Kenka College | Keuka Institute | John Kline |
| 47 | Lansingburg | Lansingburg Academy | C.T. T. R. Smith, |
| 1149 | Lockport | Genesee Wesleyan seminary | Sister Antonia.... |
| 1150 | Locust Valley | Friends A cademy | A. Davis Jacks |
| 1151 | Macedon Center | Macedon Academy | J. G. Mc Connel |
| 1153 | Manlus | St. Johns Minitary school | William Carleton Tift, A. H |
| 1154 | Mohegan | Billinge's (Miss) School | Louise Billinge |
| 155 | Montour I | Cook Academy --...- | Charles S. Estes, Ph. |
| 1157 | Mount Vernon | Lockwood's (Misses) Collegiate | Miss Leila H.Lock wood |
| 1158 | Neperan | Concordia College |  |
| 1159 | New Brighton. | Botsford's (Misses) School Girls. | L. H. Botsford |
| 1169 | do | Staten Island Academy and | Frederick E. Par |
| 1181 | Newburg | Maekie's (Miss) Seminary | Misses Mackie |
| 1163 | New York (43 West 4ith | Mount St. Mary's Academy | Sister Mary Cyprian Mary B. Whiton, A.B |
| $\begin{aligned} & 1164 \\ & 1165 \end{aligned}$ | New York (Kings Bridge) New York (50) 5th ave) | Academy of Mount St. Vincent. Allen's (Francis B.) School for | Margaret M. Maher. Francis Bellows Allen |
| 1166 | New York (151 Convent | Barnard School for Girls | Katharine H. Davis |
| 116\% | New York (120 West 128th | The Barnard School (Boys) | Wm. Livingston H |
| 1108 | New York (435 Madison | Berkeley School | John |
| 1199 | New York (17 West 4th | Brearley School | James A. Crosive |
| $11 \% 0$ | New ${ }^{\text {st. }}$ York (132 West 71st | Callisen's School for Boy | A. W. Callisen |
|  | st.). | and Young Men. |  |
| 171 | New York ( c 21 Madison | The Chapin Collegiate School. | Henry Barton Chapin, D. D |
| 1172 | New York (204, 5th ave.) | Classical School for Girls. | Helen M. Sco |
| 1173 | New York (241-243 West | Collegiate School | L.C. Mygatt |
| 1174 | New York (31-36 East 51st <br> st.). | Columbia Grammar School | Benj. H. Campbell |

and other private secondary schools for the scholastic year 1899－1900－Contd．

| Religious denomina－ tion． | $\begin{gathered} \text { Sec- } \\ \text { ond- } \\ \text { ary } \\ \text { in- } \\ \text { struct } \\ \text { ors. } \end{gathered}$ |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  | 'It!.ap א.Ieq!!!tur u! . aəqunn |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { Second- } \\ \text { ary } \\ \text { stu- } \\ \text { dents. } \end{gathered}$ |  | Ele－ men－ tary stu． dents． |  | Preparing for college． |  |  |  | Giadu－ ates in 1900. |  | Collegeprepar－atorystuderitsin theclassthatgradu－atedin1900. |  |  |  |  |  |  |
|  |  |  | Clas－ sical course． | Scien－ tific course． |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | $\stackrel{\dot{y y}}{\stackrel{y}{5}}$ |  |  |  | $\begin{aligned} & \text { む゙ } \\ & \text { む゙ } \end{aligned}$ |  | $\stackrel{\stackrel{9}{\mathrm{~s}}}{\stackrel{\text { sing }}{\prime}}$ |  |  |  |  |  | $\stackrel{\dot{0}}{\stackrel{y}{\text { ® }}}$ |  |  |
| 4 | 55 | 6 | k | 8 |  |  | 9 | 110 | 是 | H68 | 33 | 1题 | 且 8 | 16 | 188 | 18 | 厚 6 | 89 | 918 | 88 |  |
| Nonsect | 4 | 0 | 11： | 0 | 40 | 0 | 2 | ， |  |  | 4 | 0 | 2 | 0 | 4 | 14 | 600 | 9t0， | 11.9 |
| Nonsect． | 2 | 6 | 0 | 40 | ， | 10 | 0 | 2 |  | 3 | 0 | 9 | 0 | 2 | 4 | 0 | 1，100 | \％0，000 | 1130 |
| Univ | 6 | 6 | 34 | 23 | 11 | 7 | 6 | 3 |  | 2 | 15 | 6 | 4 | ， | 4 | 51 | 1，500 |  | 1181 |
| Nonsect． | 5 | 2 | 35 | 50 | 15 | 20 | 25 | 16 |  |  | ， | 4 | 5 | 3 | 5 | 35 | 2，000 |  | 1132 |
| P．E | 1 | 7 | 0 | 41 | 2 | 6 | 0 | 22 | 0 | 3 | 0 | 5 | 0 | 8 |  |  |  |  | 1133 |
| P． E | 11 | 0 | 114 | 0 | 28 | 0 | 50 | 0 |  | 0 | 25 | 0 | 20 | 0 | 4 | 0 | 1，200 | 1，125，000 | 1134 |
| P．E | 1 | 5 | 0 | 20 | 0 | 0 |  |  |  |  | 0 | ， | 0 |  |  |  |  | 25， 000 | 1135 |
| Nonsec | 3 | 2 | 45 | 20 | 75 | 60 | 6 | 5 | 15 | 10 | 0 | 4 | $\stackrel{2}{2}$ | 0 | 4 | 0 | 8，010 | 20，000 | 1136 |
| Bapt | 7 | 0 | 144 | 0 | 0 | 0 | 60 | 0 |  | 0 | 9 | 0 | 9 | 0 | 4 | 0 | 2，000 | 91，000 | $113 \%$ |
| Luth | 6 | 4 | 35 | 20 | 15 | 10 | 1 | 0 |  | 0 | 3 | 0 | 0 | 0 | 4 | 0 | 4，006 | 35，000 | 1138 |
| Nonsect | 0 | 3 | 0 | 35 | 37 | 2 | 2 | 0 |  | 0 |  |  |  |  | 35 |  | 510 | 18，000 | 1139 |
| R．C | 1 | 1 | 14 | 35 | 196 | 193 | 0 | 0 | 0 | 0 |  |  |  |  |  | O | 700 | $40,00 \mathrm{H}$ | 1140 |
| Nonsect | 0 | 12 | 0 | 30 | 0 | 8 | 0 | 1 | 0 | 0 | 0 |  |  |  |  | 0 | 800 | 6， 010 | 1141 |
| Nonsect． | 8 | ． 0 | 81 | 0 | 0 | 0 | 6 | 0 |  | 0 | 14 | 0 | 14 | 0 | 3 | 0 | $49 \%$ | 9＇，390 | 1143 |
| Nonsect． | 4 | 3 | 49 | 1 | 0 | 0 | 49 | 1 |  |  | 9 | ， |  |  |  |  |  |  | 1143 |
| R．C． | 0 | 5 | 0 | 10 | 30 | 50 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 5 | 0 | 993 | 15， 000 | 1141 |
| Nonsect． | 2 | 0 | 10 | 0 | 0 | 0 | 8 | 0 | 1 | 0 | 4 | 0 | 4 | 1 |  |  |  |  | 1145 |
| Nonsect | 4 | 2 | 31 | 11 | 28 | 14 |  |  |  |  | 13 | 3 | 13 | 3 | 4 | 0 | 2，000 | 109，500 | 1146 |
| Nonsect | 2 | 4 | 19 | 44 | 20 | 14 | 7 | $\stackrel{7}{4}$ | ， | 6 | 4. | 13 | 4 | 5 | 4 | 0 | 1，000 | 10， 509 | 1147 |
| M．E． | 6 | 6 | 90 | 115 | 15 | 15 | 20 | 5 |  | 0 | 21 | 15 | 15 | 8 | 4 | 0 | 5， 175 | 100， 006 | 1148 |
| R．C | 0 | 3 | 0 | 36 | 15 |  | 0 | 0 |  |  | 0 | 2 | 0 | 0 |  |  | 1， 155 | 84， 155 | 1149 |
| Friends | 0 | 4 | 29 | 20 | $\because$ | 24 | 15 | 12 |  | 11 | 5 | 2 | 3 | 0 | 1 | ， | 70 | 40，400 | 1150 |
| Nonsect | 1 | 1 | －26 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 3 | 0 | 0 | 4 | O | 345 | 4， 000 | 1151 |
| Epis | 11 | 0 | 141 | 0 | 30 | 0 | 21 | 0 | 55 | 0 | 15 | ， |  |  | 1 | 141 | 500 | 130,000 | 1152 |
| Bapt | 3 | 3. | 58 | 59 | $\stackrel{2}{2}$ | 1. | 10 | 3 | 2 | 0 | 3 | 4 | 2 | 1 | 4 | ， | 545 | 17，350 | 1153 |
| Nonsect | 0 | 3 | ？ | 9 | 0 | 1. | ${ }_{9}^{0}$ | 12 | 0 | 0 | 0 | 1 | －－－ |  |  |  |  | 20， 000 | 1154 |
| Sapt ．－．．． | 5 | 6 | 49 | 46 |  | 0 | 7 | 12 | 7 | 1 | 4 | 6 | 4 | 6 |  | 19 | 2，371 | 113，440 | 1155 |
| Nonsect．－－ | 1 | $\stackrel{7}{7}$ | 30 | 35 | 30 | 35 | 6 | 5 | 4 | 3 | 2 | 4 | 1 | $\because$ | 4 |  | 500 | 10，000 | 1156 |
| Protestant | 1 | 7 | 0 | 40 | 3 | 37 | 0 | 20 |  |  | 0 | 0 |  | 0 | 4 | 1 | 1，000 | 25， 000 | $115{ }^{\circ}$ |
| Luth |  | $0$ | $3 \cdot$ | 0 | 0 | 0 | 30 | 0 | 0 |  | 10 | 0 | 8 | 0 | 3 | 0 | 509 | 5， 000 | 1158 |
| Epis． | 0 | 3 | 0 | 24 | 0 | 35 | 0 | 3 | 0 | 0 | 0 | 2 | 0 | 0 |  | 0 | 420 | 10，000 | 1159 |
| Nonsect | 6 | 4. | ． 54 | 63 | 76 | 82 | 35 | 13 | 29 |  | 7 | 9 | 6 | 4 | 4 | （） | 8，615 | 35，000 | 1160 |
| Nonsect | 0 | 7 | 0 | 30 | 0 | 30 |  |  |  |  | 0 | 7 | 0 | 2 |  |  | 2，000 |  | 116 |
| ก．C．－．． | 0 | 2 | 0 | 13 | 0 |  | 0 | 0 | 0 | ， |  |  |  |  | 9 |  | 1， $2 \times 0$ | 40,38 | 1168 |
| Nonsect． | 1 | 4 | 0 | 15 | ， | 28 | 0 | 15 |  |  | 0 | 1 | 0 | 1 |  |  | 2，000 |  | 1163 |
| R．C | 3 | 16 | 0 | \％9 | 0 | 53 | 0 |  |  | 0 | 0 | 6 | 0 | 0 | 4 | ， | 7,165 | 352， 583 | 1164 |
| Nonsect． | 5 | 1 | 19 | 0 | 19 | 0 | 16 | 0 |  | 0 | 1 | 0 | 0 | 0 |  | 0 | 150 |  | $\underline{1165}$ |
| Nonsecî | 1 | 3 |  | 18 | 30 | 89 | ） | 2 | 0 | 0 | ） | 4 | 0 | 0 |  | 14 | 150 | 10，000 | 1166. |
| Nonsect | 9 | 1 | 50 | 0 | 70 | 0 |  | 0 |  | 0 | 14 | 0 |  | 0 |  | 50 | 5，000 | 40，000 | $116 \%$ |
| Nonsect | 15 | 10 | 200 | 0 | 0 | 9 | $12 \%$ | 0 |  | 0 |  | 0 | 25 | 0 | 5 | 200 | 1，000 | 180，000 | 1168 |
| Nonsect． | 0 | 24 | 0 | 130 | 0 | 70 | 0 | 0 |  |  | 0 | 30 |  |  | $\bigcirc$ | 0 | 5，000 | 220， 000 | 1169 |
| Nonsect．．． | 2 | 0 | 120 | 0 | 5 | 0 | $\varepsilon$ | 0 |  | 0 |  |  |  |  | 5 | 0 | 350 | 40，000 | 1170 |
| Nonsect． | $\overline{5}$ | 1 | 23 | 0 | 27 | 0 | 15 | 0 |  | 0 | 6 | $0$ | $6$ | $0$ | 1 | 0 |  |  | $11 \%$ |
| Nonsect． | 0 | 10 | ） 0 | 40 | 7 | 13 | 0 | 0 |  |  | 0 | $9$ | 0 | $\approx$ |  | 105 | 700 | 100，000 | 117\％ |
| Nonsect．．－ |  |  | ） 66 |  |  | 0 |  | ． 0 | 0 | 0 | 15 | 0 | 15 | ） |  | 105 |  |  | 11.2 |
| Nonsect． | 1 | $2$ | $114$ | 0 | 37 | ） | 23 | 10 |  | 0 | 31 |  |  |  |  | 0 | 500 |  | 1174 |

Table 43.-Statistics of private high schools, endoved academies. seminaries,


[^136]and other private secondary schools for the scholastic year 1899-1900-Contd.


Table 43.--Statistics of private high schools, cndowed academies, seminaries,


[^137]and other private secondary schools for the scholastic year 1899－1900－－Cont＇d．

| Religious denomina－ tion． | Sec－ond－aryin－struct－ors． |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  | Number in military drill． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { Second- } \\ & \text { ary } \\ & \text { stu } \\ & \text { dents. } \end{aligned}$ |  | $\begin{aligned} & \text { Ele- } \\ & \text { men- } \\ & \text { tary } \\ & \text { stu- } \\ & \text { dents. } \end{aligned}$ |  | Preparing for college． |  |  |  | Gradu－ ates in 1900. |  | College prepar－ atory students in the class that gradu－ ated in 1960. |  |  |  |  |  |  |
|  |  |  | Clas－ <br> sical course． | Scien－ tific course |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \text { 号 } \\ & \text { 荗 } \end{aligned}$ | ¢ |  |  |  |  |  |  | 㡙 |  | 或 | $\begin{aligned} & \text { © } \\ & \text { 島 } \\ & \text { 0 } \\ & \text { H } \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| 4 | 5 | 6 | g | 5 |  |  | （3） | 18 | 且且 | 建嫃 | $1: 8$ | E ${ }^{4}$ | 15 | 16 | 昷 ${ }^{3}$ | \％ 8 | 19 | 1314 | 9 1 | 228 |  |
| Epis | 5 | 21 | 0 | 120 | 0 | 30 | 0 | 35 | 0 | 5 | 0 | 20 | 0 | 4 | ， |  | 5，000 |  | 1210 |
| R．C | 0 | 2 | 0 | 11 | 1 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ， | 4 | 0 | 1，000 | 838， 300 | 1211 |
| Nonsec | 1 | 29 | 0 | 150 | 0 | 36 | 0 | 8 | 0 | 7 | 0 |  | 0 | 3 | 5 |  | 1，000 |  | 1212 |
| P．E | 6 |  | 132 | 0 | 291 | 0 | 64 | 0 |  | 0 |  |  |  | 0 | 4 | 0 |  | ＊ 296,196 | 1213 |
| P．E | 0 |  | 0 | 20 | 3 | 16 | 0 | 10 |  |  |  |  | 0 |  | 4 | 0 | 800 |  | 1214 |
| Nonsect | 0 | 18 | 0 | 140 | 0 | 100 | 0 | 50 |  |  |  |  |  |  | 4 |  | 1，000 | 125， 000 | 1215 |
| R．C | 0 |  | 0 | 35 | 0 | 98 | 0 |  |  | 0 | 0 |  | 0 |  | 3 |  |  | 75， 000 | 1216 |
| Nonsect | 4 | 11 | 0 | 45 | 1 | 15 | 0 | 11 |  |  | 0 | 12 | 0 |  | 4 |  | 1，000 | 75， 000 | 1217 |
| Nonsect | 0 |  | 0 | 34 | 0 | 6 | 0 | 5 |  | 5 | 0 |  | 0 |  | 4 | 0 |  |  | 1218 |
| Nonsect | 4 | $0$ | 25 | 0 | 55 | 0 | 10 | 0 |  | 0 | 9 | 0 | 4 | 0 | 4 | 0 | 300 | 10， 000 | 1219 |
| P．E | 5 | 0 | 19 | ＋ | 14 | 0 | 10 | 0 |  | 0 | 3 | 0 | 1 | 0 | 4 | 19 | 1，405 | 160，643 | 1：200 |
| Nonsect | ธ |  | 44 | 0 | 14 | （ $)$ | 6 | ， | 4 | 0 | 1 | 0 |  |  | 44 |  | 2，000 | 150， 000 | 1201 |
| Nonsect |  |  | 0 | 15 | 0 | 5 | 0 | 4 |  |  |  |  | 0 | 4 |  |  |  |  | 1222 |
| P．E． | 1 | 1 | 7 | 15 | 1 | 0 | 6 | 8 | 1 | 0 | － | 8 | 9 | 4 | 4 |  | 895 | 22，950 | 12：3 |
| Nonsect． | 2 | 1 | 6 | 11 | 17 | 10 | 0 | 0 | 0 | 0 | 3 | 2 | ， | 0 | 3 | 0 | 1，200 | 15，000 | 1224 |
| Nonsect． | 5 | 0 | 40 | 0 | 14 | 0 | 8 | 0 |  | 0 | 5 | 0 |  |  | 4 | 40 | 400 | 25，000 | 1205 |
| Nonsect | 13 | 0 | 98 | 0 | 15 | 0 | 0 | 0 | 6 | 0 | 8 | 0 | 6 | 0 | 4 | 98 | 1，060 |  | 1206 |
| Epis． | 0 | 6 | 0 | 42 | 0 | $2 \%$ | 0 | ， |  |  | 0 | 7 | 0 | 1 | 5 |  |  |  | 1227 |
| Nonsect | 2 | 8 | 0 | 78 | 5 | 16 | 0 | 1 | 0 | 0 | 0 | ， | 0 | 1 |  |  |  |  | 1228 |
| Free Bapt． | 1 | 3 | 26 | 29 | 18 | 10 | 2 | ， | 2 | 1 | 1 | 6 | －1 | 1 | 4 | 0 | 1，000 | 12，000 | 1209 |
| Nonsecti．．－ | 0 | 3 | 0 | 39 | 0 | 111 | 0 | 0 | 0 | ， | 0 | 11 | 0 | 0 | 4 |  | 980 | 57， 926 | 1230 |
| R．C． | 0 | 3 | 10 | 25 | 110 | 110 | 1 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | ， |  | 450 | 15， 000 | 1201 |
| Nonsect | 1 | 5 | 0 | 60 | 14 | 30 | 0 | 20 |  |  | 0 | 6 |  |  | 5 |  |  |  | 1232 |
| Nonsect | 1 | 4 | 25 | 50 | 25 | 50 | 0 |  |  |  | 0 |  | 0 |  |  | 0 |  |  | 1233 |
| Nousect | 11 | 0 | 104 | 0 | $4^{\prime \prime} 7$ | 0 | 17 | 0 | 45 | 0 | 12 | 0 | 9 | 0 | 5 | 104 | 500 |  | 1234 |
| M．E． | 3 | 5 | 55 | 95 | 1 | 3 | 4 | 1 | 7 | 12 | 8 | 14 | 0 | 1 | 4 | 0 | 2，440 | 81，875 | 1235 |
| Nonsect． | 3 | 0 | 55 | 0 | 17 | 0 | 18 | 0 |  | 0 | 11 | 0 | 9 | 0 | 4 |  | － 500 |  | 1236 |
| Nonsect | 0 | 5 | 0 | 57 | ， | 58 | 0 | ， |  |  | 0 | 5 |  |  | 4 |  | 1，700 |  | 1237 |
| R．C | 0 | 15 | 0 | 45 |  | 45 | 0 | 2 |  | 0 | 0 | 5 | 0 | 0 | 4 |  | 1，600 | 100， 000 | 1238 |
| R．C | 0 | 17 | 0 | 123 | 0 | 79 | 0 | 0 |  | 0 | 0 |  | 0 | 4 | 4 |  | 4，175 | 157，732 | 1239 |
| Nonsect | 0 | 7 | 0 | 43 | 0 | \％ | 0 | 13 |  |  | 0 |  |  |  | 4 |  |  |  | 1240 |
| Ev．Luth | 5 | 0 | 42 | 0 | 0 | 0 | 42 | 0 |  |  | 5 |  |  |  | 6 |  | 800 | 26，500 | 1241 |
| R．C | 0 | － 3 | 0 | 41 | 0 | 62 | 0 | 0 |  | 7 | 0 | 2 | 0 | 0 | 4 | 0 | 1， 133 | 51， 373 | 1242 |
| 12．C | 0 | 2 | 4 | 13 | 16 | 23 | 2 | 3 |  |  | 0 | 0 | 1 | 0 | 5 |  | 250 |  | 1243 |
| Meth | 0 | 2 | 13 | 15 | 17 | 30 | 2 | 1 |  | 1 | 3 | 4 | 3 | 4 | 4 | 20 | 896 | 4，200 | 184 |
| R．C ． | 0 | 4 | 0 | 6 | － | 19 |  |  |  |  |  |  |  |  | 4 |  |  |  | 1245 |
| Nonsect | 0 | 2 | 5 | 13 | 3 | 4 | 0 | 4 |  | 0 | 1 | 4 | 0 | 0 | 4 | 0 |  | 20，000 | 1246 |
| Nonsect ．－ | 7 | 0 | 60 | 0 | 11 | 0 | 30 | 0 |  | 0 | 10 | 0 | 8 | 0 | 4 | 60 | 2，000 | 200，000 | 1247 |
| Nonsect ．． | 7 | 0 | 55 | 0 | 30 | 0 | 8 | 0 | 20 | 0 | 8 | 0 | 6 | 0 | 4 | 55 | 12，000 | 100， 000 | 1248 |
| Nonsect | 2 | 8 | 0 | 105 | 10 | 20 | 0 | 4 |  |  | 0 |  |  |  | 4 |  | 1，250 |  | 1249 |
| Nonsect | 1 | 1 | 12 | 29 | 33 | 35 | 4 | 5 | 5 | 5 | 2 | 2 |  |  | 4 | 0 | 500 | 4，357 | 1250 |
| Presb． | 1 | 1 | 14 | 15 | 3 | 1 | 2 | 0 |  | 0 | 2 | 6 | 0 | 0 | 4 | 0 |  | 5， 000 | 12.51 |
| Nonsect | 2 | 3 | 10 | 8 | 4 | $\stackrel{3}{3}$ | 4 | 4 |  |  |  |  |  |  | 4 |  |  |  | 1252 |
| R．C | 1 | 1 | 10 | 15 | 113 | 149 | 5 | 0 |  | 0 |  |  |  |  | 4 | 0 | 1，500 | 1：0，000 | 1253 |
| R．C．．．．．． | 1 | － 2 | 23 | 26 | 102 | 120 | 1 |  |  |  | 2 | 5 | 1 | 0 | 4 |  | 1，735 | 45,316 | 1254 |

Table 43.-Statistics of private high schools, endowed academies, seminaries,


* Statistics of 1898-99.
and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, enaiowed academies, seminaries,

and other private sccondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

and other private secondary schools for the scholastic year 1899-1900-Contd.


Tible 43.-Statistics of private high schools, endowed academies, seminaries,


[^138]and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,


* Statistics of 1898-99.
and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.--Statistics of private high schools, endowed academies, seminaries,

and other private secondary sehools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

and other private secondary schools for the scholastic ycar 1899-1900—Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

and other private secondary schools for the scholustic yeur 1899-1900-Cont'd.


Table 43.-Statistics of private ligh schools, endowed academies, seminaries,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | $\stackrel{1}{8}$ | \% |
|  | south carolina-contad. |  |  |
| $\begin{aligned} & 1628 \\ & 1629 \end{aligned}$ | Gaffney Georget | Gaffney High School | S. A. Chambers |
| 1630 | Greenville | Sterling Industrial College | D. M. Minus, A. M.', |
| $\stackrel{1631}{1632}$ | Hartsville | Wersh Meck High School. | J. Mc Mctewain |
| 1633 | Johnston | The Johnston Institute* | W.D. Holland |
| 1634 | Jordan... | Jordan Academy "-...- | R.C.Newton-...in |
| 1636 | Lake City | Lake City Hiigh School. | S. C.Mo |
| 1637 | Leesvill | Leesville College | L. B. Haynes |
| 1638 | Link | Willington High School* | - R. B. Cheatham |
| 1639 | McColl. | Palmetto High School | R.s. Fletcher |
| 1640 | Manning- | Manning Academy - -...- | Mrs.E.C.Asblo |
| 1642 | Reidville | Reidville Female College | L. P. McGee |
| 1643 | Pock Hinil | Presbyterian Hiph Sichool | Geo. Brigg |
|  | Sumter | St. Joseph's A cademy ... | Sister M. Loretto |
| 1646 | ---. do .- | Sumter Institute | Mrs. L. A. Broune an |
| $164 \%$ | Tigerville | North Greenville High School | O. J. Peterson, A. B |
| 1649 | Walhalla. | Townvile Academy Mcollough's (Miss) School. --. | Ida McColiough |
|  | south dakota |  |  |
| 1650 | Academy | Ward Academy | Mrs. Olivia Herro |
| 165 | Canton. | Augustana Conege | Antiony G. Ture |
| 1653 | ...-.do ..... | Sioux Falls College | Rev. A. Wellington N̄orton, |
| 1634 | Sturgis | St. Mar'in's Academy | Mother Angela |
| 1656 | Wessington. | Wessington Springs Seminary. | J. Gordon Baird |
|  | tennessee. |  |  |
| 465\% | Anderson | Andersonville Institute | C. T. Carpenter |
| 1658 | Aspein Hill | Aspen Hill Academy *-... | C. H. Walker, M. Sci |
| 16.90 | Athens, | Athens Femate Academy ${ }^{\text {Robinson High School*. }}$ | B. E. Atkins |
| 1661 | Bellbackle | Webb School. | W. R. and J.M. Whe |
| ${ }_{1662}$ | Birchwood- | Rutherford Graded Sc | R.'T. Putherfor |
| 11663 | Bloomingdale... | Kingsley Seminary | Joseph h. Ketr |
| 1665 | Butler | Holly Springs Colleage* | James H. Smith |
| 1566 | Camden | Benton Seminary | W |
| 1667 | Campbellsville | Campbellssille High School * | J.J. Zucce |
| 1 | Carthage | Joseph W. Alleh School | W P. ${ }^{\text {M }}$ |
| 1520 | Chapel Hill | Chapel Hill Academy .-. | W.E. Thompso |
| 18.1 | Chattanooga | Baylor's University School* | Jno. Roy Baylol |
| 1072 |  | Chattanooga College for Young | Jno. L. Cooper, A. |
| 1673 | .do | English and French School. | Diana Duval |
| 1674 | Chuckey City | Wesleyan Academ | Samuel H. Thomp |
| $16 \%$ | Clarksville | Clarksville Female Acaude | Mrrs.E.G. Bufo |
| 1677 | Cliston | Cifton Masonic Acad | W. A. Bell |
| 1678 | College | Ewing and Jefferson Coliege | O.L. White |
| 1679 | Columbia | Colnmbia Female Inst | Miss Ma |
| 1680 | Culleoka | Culleoka Academy * | John P. Graham ...-..----- |

*Statistics of 1898-99.
and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

|  | State and post-ofirce. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | \% |
|  | texnessee-continued. |  |  |
| ${ }_{1681}^{1688}$ | Cumberland Cit | Cumberland City Academy ${ }^{\text {c }}$ | J. H. Ba |
| 1683 | Doyle Staticn . | Doyle College | B. F. ${ }^{\text {done }}$ |
| 1684 | Duck River | Shady Grove Institute. | R.S. Ballow |
| 1685 1686 | East Nashville | Paxton Academic Schoul* Harold McCormick School | Alex.S.Paxto |
| 1687 | Evensville.- | Tennessee Valley Baptist Insti- | W. E. Rogers, A. M |
| 1688 | Fayetteville | Dick White College* | J. M. Langston. |
| 1690 | Friendsvilile | Peoples and Morgan's School --- | R.H. Peoples, R. ${ }^{\text {J.H.Moore }}$ |
| 1691 | Grandview. | Grandview Normal Institute .-. | H. L. Hoyt |
| 1692 1693 | Grassy Cove Hardison Mills | Grassy Cove Academy -- | Huberts.Ly |
| 1694 | Henderson | Vanderbilt Training School | R.C.Douglas |
| 1695 | Hilham | The Fisk Academy .-... | W. C. Davidson |
| ${ }_{1697}^{1696}$ | Howell. | Howell Academy | Alien Hughey |
| ${ }_{1699}^{1697}$ | ${ }^{\text {Jackson }}$ | Laue College......-.... | f. P. Hunter |
| 1699 | Kingston | Rittenhouse Academy - | W. H. Taylor |
|  | Knoxville | Baker-Himel University school. | C. W. Himel |
| 1701 | --- - do .-.....-- -- - - | East Temnessee Female Insti- | Charles C. Ross |
| ${ }_{1703}^{1702}$ | La Follette | Bis Creek Seminary* | K. C. La Grange |
| $\begin{aligned} & 1703 \\ & 1704 \end{aligned}$ | Leipers Fork | Hilsboro Hign Sch | E. Sparkm |
| 1705 | Lewisburg- | Haynes-McLean School | W.D. Hudgins |
| 1700 | Liberty | Dixie Normal School | R.C. Rose |
| 170 | Loudon | Loudon College** | A.E. Handley |
| 17709 | Minnmilie | McTyeire Institate | Robins and Peonles |
| 1710 | McLemoresville ...... | McLemoresville Collegiate In- | Albert S. Humphrey |
| 1711 | McMinnville. | Cumberland University Train- | G. A. Bearden |
| 1772 | Martin | McFerrin College | J.T. Pritchett, |
| 1714 | Maryvill | Freedmen's Normal institute | L. H. Garner- |
| 1715 | Memphis. | St. Agmes Acaden | Sister Rapha |
|  |  | St. Mary's school | Sister Sum |
| 17178 | Midaleton | Middeton High School | Werts and |
| 1719 | Midway | Midway High School | J. V.Lucas |
|  | Mont Eagle - | Fairmount College* | Miss S.P. Du |
| 172 | Mount duliet - | Caldwell Training Scio | Bostick and D |
| 1723 | Munford................ | Dyersburg District Training | W.II. Abernathy ... |
| 1724 | Nashville | Belmont College | Misses Hood and He |
| 726 |  | Bowen Academic school | S.ini ${ }^{\text {do }}$ |
| 1727 | do | St. Ceciiia's Academy .-...-. | Mother F |
| $1 \% 2$ |  | St. Joseph's A cademy | Sister M |
| 1729 | New Market. | New Market Academ | Samuel O. Hous |
|  | Newport | Newport Seminary | Alex. S. Paxto |
| 1739 | Orlinda | Orinda Normal Academ | J.P.K. Sayler, |
| 1733 | Parrottsvilie | Parrottsville Acáàmy | R.P.Driskill |
| 1734 | Petersburg | ${ }^{\text {Elizabeth Training Sc }}$ | W. E. Miller |
| 1736 | Pleasan | Pleasant Hill Aca | John C. Camp |

and other private secondary sehool．s for the scholastic year 1899－1900－Cont d．

| Religious denomina－ tion． | Sec－ ond－ ary in－ struct－ or＇s． |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { Second- } \\ & \text { ary } \\ & \text { stu- } \\ & \text { dents. } \end{aligned}$ |  | Ele－ <br> men－ <br> tary <br> stu－ <br> dents． |  | Preparing for college． |  |  |  | Gradu－ ates in 1900. |  | $\begin{gathered} \text { College } \\ \text { prepar- } \\ \text { atory } \\ \text { students } \\ \text { in the } \\ \text { class } \\ \text { that } \\ \text { grada- } \\ \text { ated in } \\ 1900 \text {. } \end{gathered}$ |  |  |  |  |  |  |
|  |  |  | Clas－ sical course． | Scien－ tific course． |  |  |  |  |  |  |  |  |  |  |
|  | $\stackrel{\text { ت゙ }}{\text { ت゙ }}$ |  |  |  | $\stackrel{\leftrightarrow}{c}$ |  | $\stackrel{\oplus}{\stackrel{\oplus}{3}}$ |  |  |  |  |  | $\begin{aligned} & \stackrel{0}{\text { ® }} \\ & \stackrel{y y y y}{*} \end{aligned}$ |  |  |  |  |  | $\stackrel{\oplus}{\underset{y y y y}{*}}$ |  |  |
| 4 | 5 | 6 | g | 9 |  |  | 9 | 1.1 | 臬直 | 13 | 18 | 苜程 | 15 | 18 | 㫫骂 | 18 | 13 | 138 | 涊退 | － 18 |  |
| Nonsect | 3 |  | 53 | 35 | 67 | $\% 0$ | 3 | 2 |  |  |  | 0 |  | 1 | 4 |  | 500 | \＄10，000 | 1981 |
| Nonsec | 2 | 0 | 25 | 18 | 110 | 70 | 10 | ， |  |  |  | 1 |  | 1 | 4 |  | 1，000 | 250，000 | 1682 |
| Bapt | 1 | 1 | 14 | 11 | 10 | 35 | 0 | 2 |  |  |  |  |  |  |  |  |  | 5， 000 | 1683 |
| Nonsect | 1 | 1. | 20 | 10 | 35 | 30 |  | 0 | 6 | $t$ |  |  |  |  | 3 |  | 150 | 2，500 | 1684 |
| Nonsect | 1 | 0 | 11 | 3 | 8 | 1 |  |  |  |  |  |  |  |  | 3 |  |  |  | 1685 |
| Presb | 1 | 0 | 9 | 6 | 37 | 20 | 2 | 2 |  |  |  | 0 |  | 0 | 3 |  |  | 4，800 | 1686 |
| Bapt． | 8 | 1 | 43 | 38 | 40 |  | 15 | 10 |  |  |  |  |  |  | 4 |  | 300 | 7，090 | 1687 |
| Nonsect | 8 | 1 | 35 | 45 | 18 | 23 | 8 | 3 | 14 | ） |  | ， | ， | $1)$ | 4 |  | 1.000 | 20，100 | 1688 |
| Nonsect | 4 | 1 | 88 | 40. | 0 | 0 |  |  |  |  | 9 | 4 | ， | 4 | 4 |  | 500 | 8，0010 | 1689 |
| Friencis | $\because$ | 1 | 23 | 19 | 13 | 21 |  |  |  |  | ， | 0 |  |  | 1 |  | 150 | 10，000 | 1690 |
| Cong | 1 | 1 | 21 | 21 | 102 | 75 | ， | 2 |  |  | 1 | 2 | 1 | 2 | 4 |  | 800 | 11，20） |  |
| Presb | 1 | 0 | 10 | 6 | 41 | 41 | （1） | 1 | 5 | 5 |  |  |  |  | 3 | 0 | 1． 100 | 3，109 | 1692 |
| Nonsect | 2 | 0 | 14 | 8 | 29 | 49 | 10 | 2 |  |  |  |  |  |  | 4 |  | 54 | 4，00） | 1693 |
| M．E．So | 2 | 2 | 25 | 30 | 17 | 9 | 8 | 3 |  |  |  |  |  |  | 4 |  | \％ 5 | 4，000 | 1694 |
| Nonsect | 1 | 0 | 17 | 8 | 20 | 33 |  |  |  |  |  |  |  |  | 2 |  |  | 250 | 1695 |
| Nonsec | 2 | 0 | 15 | 15 | 10 | 35 | \％ | 0 |  |  | 1 | ， | 1 | 0 | ， |  | 150 | 1，000 | 1696 |
| M．E | 3 | 0 | 30 | 20 | 138 | 85 | 25 | 16 | ， | 1 | 1 | 9 | 2 | 1 | 3 | 0 | 1． 500 | 35.100 | 1697 |
| M．E．So | $\%$ | 1 | 68 | 41 | 16 | 14 | － | 1. | 13 |  | ， | 0 | 1 | 0 | 4 |  | 500 | 3．， 000 | 1698 |
| Nonsect | 1 | 1 | 13 | 46 | 40 | 65 | 2 | $\cdots$ | $\sim$ | ， | \％ | 4 |  |  |  | 0 | 39 | 1，800 | 1699 |
| Nonsect－ | 5 | 0 | 73 | 0 | 20 | 0 |  |  |  |  | 0 | 0 | ， | 0 | 5 | 0 | 1，000 | 25，000 | 1700 |
| Nonsect ．－ | 0 | ， | 0 | 25 | S | 57 | 0 | 6 |  |  | 0 | 5 | 0 | 5 | － |  |  | 30，000 | $1 \% 01$ |
| Cong－ | 2 | 2 | 75 | 60 | 75 | 40 | 1 | 0 | 0 |  | 1 | 1 | 1 | 0 | 4 |  | 200 | 58， 000 | 1702 |
| Nonsect | 1 | 0 | 10 | 0 | 13 | 11 | 0 | 3 | 0 | 1 |  |  |  |  | 4 | 0 | 100 | 2，500 | 1703 |
| Nonsect | 1 | 3 | 40 | 70 | 20 | 5 |  |  |  |  | 5 | 2 |  |  | － | 1 | 50 | 2，000 | 1704 |
| Nonsect | 2 | 1 | 62 | 62 | 24 | 21 |  |  |  |  | 3 | ， |  | 0 | 5 |  | 500 | 7，000 | 1705 |
| Nonsect－－－ | 2 | 1 | 80 | 60 | 50 | 60 | 30 | 2 | 24 | 18 | 0 | 0 | 0 | 0 | 3 |  | 300 | 2，000 | 1706 |
| Cum．Presb | 1 | 1 | 10 | 15 | 15 | 10 |  |  |  |  |  |  |  |  |  |  | 30 | 1，000 | $170 \%$ |
| Nonsect | 1 | 1 | $\because 9$ | 18 | 23 | 29 | 5 | ， |  |  |  |  |  |  | 4 |  | 50 | 2，000 | 1708 |
| M．E．So－－ | $\stackrel{2}{2}$ | 0 | 43 | 12 | 0 | 0 | 15 | ， |  |  | ， | 2 |  | 2 | 4 | 0 | \％ 20 | 12， 000 | 1709 |
| M．Ep ．－．－ | 2 | 0 | 29 | 19 | 40 | 32 | ， | 1 |  |  | 2 |  |  |  | 3 |  |  | 3，000 | $1 \% 10$ |
| Cum．Presb | 1 | 2 | 41 | 37 | 78 | 39 |  |  |  |  | 1 |  | 1 |  |  |  | 1，100 | 30，000 | $1 \% 11$ |
| M．E．So | 4 | 5 | 61 | 70 | 21 | 23 | 12 | 1 |  |  | $\because$ |  | \％ |  | 4 |  | 500 | 20,000 | 1712 |
| Friends－－ | 4 | 1 | 15 | 9 | 85 | $10 \sim$ |  |  |  |  | 5 | $t$ |  |  | 8 |  |  |  | 1713 |
| Friends ．－． | 2 | 1 | 11 | 11 | 9：2 | 64 | 1 | 4 |  |  |  |  |  |  | 3 |  | 115 | 4，00！ | 1714 |
| R．C | $\bigcirc$ | 5 | 0 | 32 | 0 | 118 |  |  |  |  | 0 | 2 |  |  |  |  |  |  | 1715 |
| Epis． | 0 | 10 | 0 | 80 | 0 | 20 |  |  |  |  |  |  |  |  | 4 |  |  | 30，000 | 1716 |
| Nonsect－－ | 6 | 0 | 70 | 0 | 30 | 0 | 80 |  |  |  |  |  |  |  | \％ |  |  | 20，000 | 1717 |
| Nonsect ．－ | 1 | 0 | 25 | 15 | 50 | 40 | － | 3 |  |  |  |  |  |  | － |  |  | 1，000 | 1718 |
| Nonsect ．－ | 1 | 0 | 6 | 6 | 75 | 70 | 6 | 7 |  |  |  |  |  |  | 3 |  | 1， 0 | 1，000 | 1719 |
| Epis．．． | 0 | 4 | 0 | 20 | 9 | 10 |  |  |  |  |  |  |  |  | 4 |  | 1，600 | 20，000 | 1720 |
| Nonsect | 1 | 2 | 21 | 20 | 5 | 5 | 8 |  |  |  |  |  |  |  | 4 | （1） | －－－－－ | 1，800 | 17\％1 |
| Meth．．．－－－ | 2 | 1 | 80 | 05 | 40 | 40 | 48 | 37 | 15 | 12 | 6 | 4 | 6 | 4 | 4 | 0 | 800 | 10，500 | $172 \%$ |
| Meth．－．．． | 2 | 2 | 12 | 15 | 36 | 39 |  |  |  |  |  |  |  |  |  |  |  |  | 1783 |
| Nonscet－－ | 2 | 19 | 0 | 13\％ | O | 20 | ， | 58 |  |  | 0 | 11 |  |  | 1 |  | \％00 | 100，000 | 1784 |
| Nonsect－－ | 4 | 0 | 80 | 0 | 3 | 0 | 40 | 0 | 20 | ， | 5 | 0 | 5 | 0 | 4 |  | 800 | 10，000 | 1725 |
| Nonsect | 5 | 0 | 69 | 0 | 21 | 0 | 5 | 0 | 7 | \％ | 6 | 0 | 2 | 0 | $t$ | ） | 1，000 | 500 | 1726 |
| R．C | 0 | 8 | 0 | 75 | 0 | 50 | 0 | 15 | 0 | 15 | 0 | 10 |  |  |  |  | 3， 000 |  | 1727 |
| R．C | 0 | 2 | 0 | 16 | 90 | 202 | ， | 3 | 0 |  | 0 | 3 |  |  | 4 |  | 500 |  | $17 \% 8$ |
| Presb ．．．．－ | 2 | 0 | 14 | 16 | 98 | 99 | 8 |  | ， | 10 | 1 | ） |  |  | 4 | 0 | 500 | 5，000 | 1729 |
| Nonsect ．－ | 1. | ${ }_{0}^{0}$ | ${ }^{5}$ | 8 | 28 | 17 | 2 0 |  |  |  |  |  |  |  |  |  |  |  | 1730 1731 |
| Nonsect－－ | 1 | 0 | 15 | 13 | 48 | 45 | ， | 0 |  |  | 4 | 4 8 | 1 | 0 | 4 | 0 | 200 | 2,000 4,000 | 1731 1732 |
| Nonsect－－ | 2 | 0 | 21 | 5 23 | 60 50 | 37 | 0 | 0 0 |  | 3 | 4 | 0 3 | $\stackrel{2}{0}$ | 0 | 3 |  |  | 4，000 | $173 \%$ 1733 |
| M．E．－．．．－－ | 1 | 0 | 25 | 23 | 50 | 47 | 0 |  |  | $\therefore$ | 1. | 3 | 0 | 0 | 3 | 0 | 1，000 | 8，000 | 1733 |
| Nonsect－－ | 1 | 0 | 60 | 40 | 75 | 45 | 3 |  |  |  | 1： | 9 | 3 |  | 4 |  | 1，000 | 8，000 | 1735 |
| M．E．So ．－． | 1 | 1 | ${ }_{17}^{25}$ | 14 | 118 | 85 |  |  |  |  |  |  |  |  | 2 |  | 1，200 |  | 1736 |

Table 43.-Statistics of privaie high schools, endoved academies, seminaries,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 8 | 3 |
|  | tennessee-continued. |  |  |
| $\begin{aligned} & 1737 \\ & 1738 \\ & \hline 1038 \end{aligned}$ | Rogersville <br> do | McMinn Militery Academy Swift Memorial Institute | C. W. Davis |
| 1739 1780 | Sale Creek | Sale Creek Institute -............- | S. L. Hoover, W.T. Davies |
| 1741 | Scotts Hill | Scotts Hill College. | B. A. Tucker |
| ${ }_{1743}^{174}$ | Sevierville | Murphy College. | Alvis Craig |
| 174 | Sheloy ville | Dixon Academy*..... | Geo.M. Edgar, L |
| 1745 | Smyrna | Smyrna Fitting School -- | W. H. Bates |
| 174\% | Sazeweli | Tazewell College* | J. C. Brogan |
| 1748 | Trezevant- | Maale and Femate Academy* | J. R. Garrett |
| 1450 | Tullahoma- | Jesse Mai Aydelotte College | A. S. Foiter - |
| 1751 | Watertown. | Watertown School -...... | J.W. Patton. |
| 1789 | Well Springs | Powrells Vallay Seminary Roane College *. |  |
| 1754 | White Pine | Edwards Academy | Jacobus D. Drake |
| 1235 | Woodbury | Woodbury Academy | E. J. Lehmann. |
|  | texas. |  |  |
| ${ }^{1256}$ | A bilene | Simmons Colle ${ }^{\text {ce }}$ | O. C. Pope, D.D |
| 1 1\%8 | Arlington. | Any. |  |
|  | Athens. | Bruce Academy - | C. D. Uwen, H. W. Glasgow.- |
| 1760 1761 | Austin | St. Mary's A A ademy | Sister Superiop-- |
| 1762 | Belton. | Belton Academy* | C. H. Widemeyer |
| ${ }_{1764}^{1763}$ | Brenham | Blinn Memorial Coilege - | Q.Dosdall ${ }_{\text {Rev.j. }}$ |
| 1765 | Brownsville | St.Joseph's College.. | Rev. E. J. ÓCailaghan, |
| 1766 | Buffalo Gap | Buffalo Gap College | J. D. Cl |
| 1768 | Comanche- | Cleburne Academy |  |
| 1769 | Commerce | East Texas Normal College. | W. I Mayo |
| $1 \% \%$ | Corsicana | Miller's (Mrs.) Seminary for | Mrs. R.'T. Miil |
| 171 | Dallas... | Centrai Academy | Waldemar Ma |
| 1773 | Decatur <br> Eddy | Decatur Baptist College*--ific | B.M. Bedicher |
| 1704 | Farmer | Farmer Hich Scho | G. Haprgrave |
| 1776 | Florence. | Florence College | W. J. H older |
| ${ }_{177}$ | Forney | The Lewis Academy - | E. C.Lewis |
|  | Fort Worth | St. Ignatius Academy | Sister Louise |
| 1790 | Galveston | St. ${ }^{\text {deseph's Acaden }}$ | Sister Mary |
| 1781 | Glen Rose | Glen Rose Collegiate Institute. | L. F. Bickford, |
| ${ }_{1783}^{1782}$ | Grapevine | Grapevine College .-.-.......- | J. S. Brown |
|  | Greenwood | Greenwood Male and Female |  |
| $\frac{1784}{1 \% 85}$ | Fearne | Hearne Academy*: | o. F. Anders |
| 178 | Jacksonville | Alexander Collegiate Institute-- | E.R. Willi |
|  | Jasper | South East Texas Male and Fe- male College. | J.H.synnot |
| 1787 1788 1788 | Laredo. | Laredo Seminary | Miss N.E.Holding |
| 1789 | Marshall | Hawthorne college................ | Albert Loughridge, EL. D. |
|  |  | *Statistics of 1898-99. |  |

and other private secondary schools for the scholastic year 1899-1200-Cont d.


Table 43.-Statistics of private high schools, endowed academics, seminaries,


[^139]and other pricate secondary schools for the sehotastic year 1829-1900-Contd.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
|  | vermiont-continued. |  |  |
| 1842 | Peacham | Caledonia County Grammar | Chas. H. Cambridge |
| $\begin{aligned} & 1843 \\ & 1844 \end{aligned}$ | Poultney St. Albans | Troy Conference Academy * | H.A. Durfee, D.I Sister St. Susan |
| 1845 1846 1841 | Saxtons River Thetford | Vermont Academy* Thetford Academy | Edward Ellery, Ph. L. R. Bowdish |
| 1847 | Townshend......... <br> ytrginia. | Leland and Gray Seminary |  |
| ${ }_{1848}^{1848}$ | Abington | Abington Academy | B.R.Smith |
| 1849 1850 | Achiodes. | Acatemy of the Visita Alpha Academy*.... | Sister M. Agnes |
| 1851 | Alexandria | Episcopal High School | Lancelot M. Blackford, |
| ${ }_{185 \%}^{185 \%}$ | -...do .... | Potomac Academy <br> Seven Islands School | John S. Blackburn <br> Philip B. Ambler |
| 1854 | Bedford City | Randolph-Macon Academy | E. Sumter Smith |
| 1855 | Bellevue | Bellevue High Schoo | Wm. R. Abbott ... |
| ${ }_{1857}^{1856}$ | Berikley ${ }^{\text {Berry }}$ |  | Rev. A.E. Owen, ${ }^{\text {Miss Laura W. God }}$ |
| 1858 | Bethel Academy | Bethel Militar'y Academy | Robert A. McIntyr |
| 1859 | Blackstone | Hoge Military Academy ${ }^{\text {Blacke- }}$ | Rev.T.P.Epes, D.D |
| 1861 | Black Walnut | Cluster Springs High School. | Rev.B.W. Mebane, D. ${ }^{\text {L }}$ |
| ${ }_{1863}^{1862}$ | Bon Air- ${ }^{\text {Bowling }}$ - | Bou Air School -...- | Wev.E. Hay Rowe |
| 1864 | Bruington | Bruington Academy | Alexander Fleet |
|  | Burkeville | South Side Female Institute | R. W. Cridlin |
| 1856 | Cappahosic | Gloucester Agricultural and In- | W. G. Price .. |
| $186 \%$ 1868 | Chase City | Southside Academy | Edward C. Jai |
| 1869 | Claremont | Temperance ${ }^{\text {a }}$ Industrial, and | John J. Smaliwooi, presi- |
| 1870 | Covesviile | Cove Academy | Rev. Tamiel Blain. D.D |
| ${ }_{187}^{187}$ | Danville | Danville Military fustitut | I. H. Saunders, $p$ |
| 1873 | Dayton | Shenandoah Institute | E. U. Hoenshel. |
| 1874 | Efna | Starou College School | J. T. Crabtree, A.M |
| 18.5 | Farnham | Farrnam Academy | Rev. Re. Williara |
| 1877 | Fort Defiance | Augusta Military Academy | Chas. S. Roller, M |
| 1378 | Franklin. | Franklin Academy | J. G. Miill |
| 1879 | Front Royal | Randolph-macon Acaden | Char |
|  | Gloucester. | Suminervile Home School | John Tabb |
| 1881 | Hamptou | Eampton College | Mriss Bessie L. Fit |
| 1883 | Herndon | Herndon Seminar | Misses Castlema |
| $188 \pm$ | Lebanon | The Russell Colles | R. M. Conenhave |
| 1886 | Locustdale | Locust Dale Academy. | W. W. ${ }^{\text {W }}$. Br |
| 1887 | Lodi | Liberty Hall Home School | W. J. Edmondson |
|  | Lynchburg | Virginia Baptist Seminary | Geo. Hayes |
| 1890 | Manassas | Manassas finstitute | W. H. Whiting |
| 1891 | Mount Clinta | West Central Academy | I. S. Wampl |
|  | Mount Craw | Rockingham Military Institute | F. A. By |
| 1893 | Newport News. | rt News Military Acad- | Edward W. Huffima |
| 1894 | Norfolk. | Leache-Wood Seminary | Agnes Douglass We |

[^140]and other private secondary schools for the scholastic year 1899-1900-Conṫd.


Table 43．－Siatistics of privute ligh schools，endoued acudemies，seminaries，

|  | State and post－office． | Name． | Principal． |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | S |
|  | Virginia continued． |  |  |
| 1895 1896 | Norfolk <br> do | Noríolk Academy <br> Norfoli Mission | J．F．Blackwell ．． Wm．McKirahan |
| $189 \%$ |  | Phillips and West＇s Seminary | Misses Phillips and West |
| 1898 |  | St．Mary＇s Male Academy－－．． | Brother Raymond．．． |
| 1899 | Portsmonth | Portsmouth Academy and Com－ mercial Night school． | W．H．Stokes |
| $\begin{aligned} & 1900 \\ & 1901 \end{aligned}$ | ．．．．．do | St．Joseph＇s Academy Academy of the Visitation | Sister Agnes．．．．． <br> Gister M Justina |
| 1902 | －．－．do． | Hartshorn Memorial College ．．．－ | Lyman B．Tefft |
| 1903 |  | McGuire＇s School ．．．．．．．．．．．．．．．．． | John P．McGuir |
| 1904 | ．．．．do | Nolley＇s School for Boys | G．W．Nolley |
| 1905 |  |  |  |
| 1906 | Ridgeway | Ridgeway Institute－ | Jefferson Davis sidners．Handy |
| 1908 | Rural Retreat | Hawkins Chapel Institute | －Slack． |
| 1909 | Schuyler．．． | Klein berg High School ．－． | Misses Wailes |
| 1910 | Scottsburg | Scottsburg Normal College | Rev．C．Pe．Hairíield |
| 1911 | South Boston | South Boston Female Institute． | J．P．Snead |
| 1912 |  | Valley High School ．．．．．．．．．．．．．． | James M．Mason |
| 1913 | Spring（ararden | Spring Garden Academy <br> The Jary Baldwin Seminary | R．Scott Crowe． <br> Miss E．C．Weima |
| 1915 | ．．．．do | Staunton Military Acade | Wm． H ．Kable |
| 1916 | Suftolk | Nansemond Seminary | Mrs．Lucy H．Quimb |
| 1917 |  | St．Paul＇s Universalist Mission School | Rev：Thos．E．Wise |
| 1918 | do | Sufiolk College． | Sally A．Finne |
| 11920 |  | Suffolk Institute | A．P．Kelly－ |
| 1920 | Tazew | Suffolk Military Academy | W．G．Welborn |
| $19 \% 2$ | Ursus | Elk Creek Acaderny | M．L．Poark |
| 1923 | Warrenton | Fauquier Institute for Young Ladies． | Geo．G．Butler，A．M |
| 1924 | Waynesboro－ | Fishburne Military School | James A．Fishl |
| 1920 | Wedo | Valley Female Seminary＊－．． | J．B．Winston |
| 1932 | Winchester | Fairfax Hall. | Mr＇s．W．R．Er＇ |
| 1928 | Wise | Gladerille College | C．Y．Chapman |
| 18：9 | Wood Lawn | Male and Female Academy＊ | Everett Edridge Worrell |
|  | Washington． |  |  |
| 1930 | Ahtanum | Woodcock Academy | Rev．W．I．Daw |
| 1931 | College Place | Walla Walla College | E．L．Stewart |
| 193\％ | Olympia | Providance Academy－－．．．．．．．．．．． | Sister M．Wilford |
| 1933 | Parkland | Pacific Lutheran University ．．． | N．J．Hong |
| 1934 1935 | Ross ${ }^{\text {Seattle }}$ | Seattle Seminary－ | C．N．Bertels－－－ |
| 1936 | Snohomish | Puget Sound Academy．． | Eli Roberts Luomis |
| 1937 | South Park | College of Our Lady of Lourdes | Brother Philip |
| 1938 | Spokane | Academy of the Holy Names．．． | Sister M．Geraldine |
| 1939 | Tacoma | St．Mary ${ }^{\text {Annie Wall Wright Seminary－}- \text {－．．．．．．．}}$ | Thers．Lesa $⿴ 囗 十$ ．Williamson |
| 1941 |  | Tacoma A cademy ．－．．．．．． | Alfred P．Powelson． |
| 1942 | Waitsburg | Waitsburg Academy ．．．．．．．．．．．．．．．． | J．A．Keener ．．．．．． |
|  | west virginia． |  |  |
| 1943 | Alderson ．．．．．． |  | W．S．Ander＇son，A．M |
| 1944 | Buchannon．．．．． | West Virginia Conference Semi－ | John Wier |
| 1945 | Burnsville | Burnsville Academy ．．．．． | G．F．Queen |
| 1946 | Charlestown | Stephenson＇s Seminary－． | C．N．Campbell |

Charlestown ．．．．．．．．．．．．．．．Stephenson＇s Seminary
C．N．Campbell
＊Statisties of 1898－99．
and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 43.-Statistics of private high schools, endoured academies, seminaries,


* Statistics of 1898-99.
and other private secondary schools for the scholastic year 1899-1900-Cont'd.


Table 44.-Public and private high schools for boys only, for girls only, and for both sexes.

| State or Territory. | Public. |  |  |  |  |  |  | Private. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For boys only. |  | For girls only. |  | Coeducational. |  |  | For boys only. |  | $\begin{aligned} & \text { For girls } \\ & \text { only. } \end{aligned}$ |  | Coeducational. |  |  |
|  | $\begin{gathered} \stackrel{1}{2} \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ \text { Un } \end{gathered}$ |  | $\begin{aligned} & \mathscr{2} \\ & 0 \\ & 0 \\ & 0 \\ & \text { ou } \\ & \text { UR } \end{aligned}$ |  | $\begin{aligned} & \mathscr{A} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{gathered} \dot{\infty} \\ \stackrel{0}{\circ} \\ \hline \infty \end{gathered}$ | $\stackrel{\dot{x}}{\underset{\sim}{3}}$ | $\begin{aligned} & \dot{\sim} \\ & \dot{\sim} \\ & 0 \\ & 0 \\ & \dot{\sim} \\ & \dot{\sim} \end{aligned}$ |  | $\dot{2}$ 0 - - 0 |  | $\begin{gathered} \dot{2} \\ \stackrel{0}{0} \\ 0 \\ \text { d } \\ \text { UR } \end{gathered}$ | $\stackrel{\dot{n}}{\stackrel{\sim}{\circ}}$ | 热 |
| United States .-. -- | 41 | 16, 680 | 31 | 16,093 | 5,933 | 199, 527 | 286, 931 | 327 | $21,7 \% 6$ | 530 | 24, 199 | 1,121 | 34, 008 | 30,864 |
| North Atlantic Division |  | 13, 62, 6 | 81 | 11, 321 | 1,4.4 | 59, 707 | 84,751 | 149 | 11, 338 | 212 | 9,874 | 308 | 10,095 | 9,469 |
| South Atlantic Division | 11 | 1,262 | 10 | 2,075 | $4 \% 8$ | 9,291 | 14,385 | 66 | 3, 198 | 76 | 4,008 | 258 | 6,973 | 6,023 |
| South Central Division. | 10 | 1,198 | 7 | 2,179 | 6 6ã8 | 14, 882 | 21,410 | 39 | 2,144 | 69 | 2,979 | 309 | 9,154 | 7,764 |
| North Central Division. | 3 | 589 | 4 | $27$ | 3,156 | 104, 291 | 149,809 | 45 | 3,700 | 121 | 5,48\% | 198 | 6,315 | 6,077 |
| Western Division........ | 1 | 5 | 2 | 491 | $26 \%$ | 11,256 | 16, 596 | 28 | 1,346 | 52 | 1,856 | 48 | 1,471 | 1,501 |
| North AtlanticDivision: <br> Maine | 1 |  |  |  | 153 | 3,822 | 4,921 | 1 |  | 3 | 118 | 29 | 1,036 | 1,229 |
| New Hampshire | 1 | 57 |  |  | 56 | 1,515 | 2,102 | 8 | 963 | 2 | 109 | 23 | 1,679 | 1) 849 |
| Vermont.. |  |  |  |  | 55 | 1,482 | 1,956 |  |  | 2 | 59 | 15 | 496 | 480 |
| Massachusetts | 5 | 2,254 | 2 | 1,426 | 230 | 13, 464 | 18,800 | 16 | 1,550 | 36 | 1,954 | 45 | 1,484 | 923 |
| Rhode Island |  |  |  |  | 20 | 1,4\%6 | 1,9\%4 |  | 297 | 5 | 160 | 5 | 68 | 109 |
| Connecticu |  |  |  |  | 74 | 3,519 | 4,588 | 16 | 799 | 20 | 878 | 27 | 611 | 521 |
| New York | 5 | 10,113 | 3 | 6,530 | 370 | 18, 306 | 26,75\% | 59 | 3, 640 | 84 | 4,046 | 61 | 1,610 | 1,809 |
| New Jersey |  |  |  |  | 96 | 4,252 | 7,008 | 18 | 1,320 | 29 | 1,020 | 27 | 1789 | 769 |
| Pennsylvania | 4 | 1,196 | 3 | 3,305 | 370 | 11,241 | 16,645 | 2 | 2,763 | 31 | 1,530 | 76 | 3,322 | 2,780 |
| South Atlantic Division: <br> Delaware.............. |  |  |  |  | 13 | 402 |  |  |  | 1 |  | 3 | 157 | 98 |
| Maryland | 7 | 947 | 5 | 1,034 | 39 | 773 | 1,20: | 16 | 812 | 16 | 1,085 | 14 | 226 | 191 |
| Distirict of Columbia |  |  |  |  | 5 | 1,313 | 2,118 | $\stackrel{ }{ }$ | 204 | 1\% | 436 | 2 | 58 | 59 |
| Virginia | 2 | 100 | 1 |  | 67 | 1,496 | 2,725 | 24 | 1,193 | 22 | 991 | 36 | 756 | 662 |
| West Virginia |  |  |  |  | 32 | 655 | 1,290 | 2 | . 73 | 2 | 116 | 9 | 382 | 394 |
| North Carolina |  |  |  |  | 21 | 405 | 538 | 8 | 533 | 7 | 479 | 107 | 3, 157 | 2,318 |
| South Carolin | 2 | 215 | 1 | 340 | 101 | 1,478 | 1,965 | 4 | 157 | 4 | 128 | 28 | . 768 | , 676 |
| Geor'gia |  |  | 3 | 692 | 117 | 2,202 | 2. 951 | 5 | 216 | 8 | 588 | 54 | 1,405 | 1,528 |
| Florida --.-.------- |  |  |  |  | 33 | 557 | 946 |  |  |  | 87 | 5 |  | 97 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky .- | 2 | 22 | 1 | 752 | 67 | 1, 690 | 2, 453 | 10 | 497 | 22 | 797 | 63 | 1,58 | 1,263 |
| Tennessee | , | 36 |  |  | 160 | 2, 133 | 3,273 | 6 | 331 | 10 | 597 | 83 | 2,642 | 2,079 |
| Alabama | , | 135 | 3 | $7 \% 1$ | 57 | 1,343 | 1,568 | 4 | 24 | 7 | $23{ }^{2}$ | 44 | 982 | 899 |
| Mississipp | 1 | 15 |  |  | 99 | 1,008 | 2,434 | 5 | 185 | 8 | 251 | 30 | 803 | 738 |
| Louisiana | 1. | 294 | 2 | 65 | 28 | 520 | \% 251 | 5 | 351 | 10 | 309 | 15 | 285 | 327 |
| Texas | , | 5 |  |  | 239 | 6,073 | 8, 851 | 7 | 438 | 11 | 768 | 44 | 2,056 | 1,647 |
| Arlkansas |  |  | 1 | 6 | 60 | 1,371 | 1,847 | 2 | 85 |  |  | 19 | 666 | 622 |
| Oklahoma |  |  |  |  | , | $11 \%$ | 219 |  |  | 1 | 20 |  |  |  |
| Indian Territory .-- |  | 1 |  |  | 2 | 32 | 34 |  |  |  |  | 11 | 192 | 189 |
| North Central Division: Ohio |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Indiana | 1 | 6 |  |  | 381 | 11,178 | 15, 231 | - | 390 | 11 | 457 | 13 | 670 | 696 |
| Illinois | 1 | 578 |  |  | 343 | 14,092 | 22, 776 | \% | 584 | 29 | 1,234 | 28 | 866 | 791 |
| Michigar |  |  | 1 | 6 | 293 | 12, 146 | $16,6 \breve{ } 9$ | 2 | 160 | 8 | 423 | 10 | 236 | 356 |
| Wisconsin |  |  |  |  | 231 | 8, 700 | 11,876 | 7 | 544 | 7 | 382 | 9 | 296 | 240 |
| Minnes |  |  |  |  | 115 | 5,020 | 7,290 | 6 | 484 | 12 | 558 | 11 | 438 | 367 |
| Iowa. |  |  |  |  | 344 | 11,773 | 17,219 |  |  | 4 | 125 | 31 | 1,013 | 1,060 |
| Missouri |  |  | 3 | 21 | 231 | 8,208 | 12,3\% | 11 | 924 | 17 | 962 | 47 | 1,353 | 1,269 |
| North Dakota |  |  |  |  | 27 | 442 | 688 |  |  |  |  | 2 | 70 | 33 |
| South Dakota |  |  |  |  | 61 | 1,111 | 1,506 |  |  |  |  | \% | 135 | 172 |
| Nebraska | 1 | 5 |  |  | 219 | 6,048 | 9,155 |  |  | 7 | 173 | 12 | 279 | 232 |
| Kansas |  |  |  |  | 203 | 5, 870 | 9,043 | 1 | 51 | 3 | 5 | 10 | 415 | 377 |
| Western Division: ${ }^{\text {W }}$ ( ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wyoming |  |  |  |  | 7 | 155 | 202 |  |  |  |  |  |  |  |
| Colorado | 1 |  | 1 |  | 42 | 2, 33: | 3, 568 | 1 | 18 | 1 | 20 | 4 | 58 | 101 |
| New Mexico |  |  |  |  | 7 | 100 | 143 |  | 44 | 1 | 59 |  |  |  |
| Arizona. |  |  |  |  | 2 | 57 | 115 |  |  | 1 | 15 | 1 | 10 | 18 |
| Utah |  |  |  |  | 5 | 491 | 684 | 1 | 90 | 1 | 60 | 11 | 770 | 696 |
| Nevad |  |  |  |  | 9 | 164 | 267 |  |  |  |  |  |  |  |
| Idaho |  |  |  |  | 8 | 216 | 270 | 1 | $2 \%$ | 1 | 30 | 3 | 66 | 59 |
| Washingt |  |  |  |  | 47 | 1,326 | 2, 137 | 1 | 15 | 4 | 230 | 8 | 135 | 146 |
| Oregon. |  |  |  |  | 17 | 743 | 1,173 | - | 165 | 6 | 210 | 10 | 202 | 219 |
| California |  |  |  | 486 | 104 | 5, 030 | 7,104 |  | 992 | 33 | 1,166 | 11 | 230 | 292 |

## CHAPTER XL.

MANUAL AND INDUSTRIAL TRAINING.

References to recent Reports of the United States Commissioner of Education, in which this sabject has been treated or statistics published: Annual Peport for 1888-89, pages 411-428, $1362-1357$; 1889-90, pages 1148, 1209-1212, 1351-1356; 1891-92, page 1197; 1892-93, pages 186-188, 55957ŏ; 1893-94, pages 87\%-949, 2093-2169; 1891-95̆, page 21\%0; 1895̈-96, pases 989-99ß, 1001-1152, 13211329, 1510-1521 (column 8); 18906-97, pages 193-197, 689-\%03, 2211-2282 (column 8), 2279-2294; 1897-98 pages 141, 194, 728, 2370-2382 (column 8), 2419-2440; 1898-92, pages 26, 83, 179-189, 208-209, 853-863, 1355-1361, 1442, 1448, 1525-1536 (column 8), 2139-2162.
There is a steady increase from year to year in the enrollment in the schools especially devoted to manual and industrial training. The number of such schools reporting to this Office for the year 1890-1900 was 144, an increase of 19 over the preceding year. The different pupils receiving manual or industrial training in these schools was 41,736 , an increase of 3,115 in one jear.

The 144 schools, including 32 industrial schools for Indian children, had 1,199 teachers in the manuai and industrial fraining departments-612 men and $58 \%$ women-as shown in Table 3. The number of boys receiving manalal training was 25,754 , an increase of 2,752 , and the number of girls 15,982, an increase of 363.

The total expenditure for manual training by 106 of the 144 schools was $\$ 766,121$. Of the aggregate of expenditure for $1899-1900$ the sum of s3i3,784 was paid teachers, $\$ 91,405$ for material, $\$ 42,862$ for new tools and repairs, and $\$ 55,070$ for incidentals and for items not classified.

The statistics in detail for the 112 manual and industrial training schools other than Indian schools will be found in Table 4. In these 112 schools there were employed Sr1 teachers- 479 men and 392 women. In the same schools there were 35,191 pupils- 2,193 boys and 18,261 giris.

Table 5 gives in detail the statistics of the 32 Indian schools. There were 328 teachers employed in these schools- 133 men and 195 women. The number of pupils was 6,545 , the number of boys being 3,824 and girls 2,721 .

The branches of manual training or the trades targht and the number of pupils in each branch, so far as reported by the individual schools mentioned in Tables 4 and 5 , are shown in Tabie 6 .

This Office did not attempt to ascertain the number of pupils receiving manual or industrial training in 1899-1900 in institutions not distinctively manual or industrial training schools. General statistics of this character were collected in 1893-94 and printed in the Report of this Office for that year, pages 2093 to 2169.

Table 1, on the next page, shows the number of cities of 8,000 population and over in whose public schools manual training has been given in the last ten years. In 1890 it was given in 37 cities, in 1894 in 95 cities, in 1896 in 121 cities, in 1898 in 146 cities, and in 1900 in 169 cities.

Table 2 gives a list of the 169 cities in whose public schools manual training (other than drawing) was given in 1899-1900. and indicates the grades in each city system in which such instruction was given.

TAble 1.-Number of cities of S,000 population and over, in each State, in which manual training uas given.


Table 2.-Cities in which manual training (other than drawing) was given in the wublic schools in 1899-1300.

| Cities. | Grades in which manual training was given. | Cities. | Grades in which manual training was given. |
| :---: | :---: | :---: | :---: |
| California. | $\begin{aligned} & 7,8,9, \text { and } 10 . \\ & 5,6,7 \text { and } 8 . \\ & 1 \text { to 4 (primary). } \\ & 6,7, \text { and } 8 . \\ & \text { High school. } \\ & 1 \text { to } 8 \text {. } \\ & 9,10, \text { and } 11 . \end{aligned}$ | CONNECTICUT. |  |
| Fresno |  | Hartfore | 8 and 9. <br> 5, 6, 7, 8, and 9 . <br> $6,7,8$, and 9 . <br> 8 and 9. <br> 4, 5, 6, and \%. <br> 7 and 8. <br> 8,9, and high school. |
| Los Angele |  | Manchester (South). |  |
| Pasadena |  | Naugatuck |  |
| San Diego |  | New Britain |  |
| San Francisco |  | New Haven |  |
| Stockton.. |  | Stamford |  |
| COLORADO. |  | DELAWARE. <br> Wilmington | High school. |
| enver: <br> District No. 1 <br> District No. 7 | All. <br> $1,2,3,4,5,6,7,8,9,10,11$, and 12 . | DISTRICT OF COLUMbia. <br> Washington: |  |
| District No. 17 Pueblo: <br> District No. 1 <br> District No. 20 | All. <br> 4, 5, and 6 (sloyd). <br> 5, 6, 7,8,9, and 10. | Seventh to eighth divisions. Ninth to eleventh divisions. | 3, tlurough high school. 7 and 8. |

Table 2.-Cities in which manual training (other than drawing) was given in the public schools in 1899-1900-Continued.


Table 2.-Cities in which manual training (other than drawing) was given in the public schools in 1899-1900.

| Cities. | Grades in which manual training was given. | Cities. | Grades in which manual training was given. |
| :---: | :---: | :---: | :---: |
| NEW YORK-cont'd. |  | SOUTH DAKOTA. |  |
| Newburg. | $3,4,5,6,7,8,9,10$, and 11. | Sioux Falls | All. |
| New York ........... | High, elementary, and truant. <br> Primary and intermediate. <br> $4,5,6,7,8$, of one scliool only. |  |  |
| Port Chester |  | Austin |  |
| Rochester |  | Palestine. | Primary. |
| Syracuse | Primary, grammar, and <br> high schools. <br> $5,6,7,8$, and 9 . <br> High school. <br> 4,5, 5,7 , and high school. | UTAF. |  |
| Utica $\qquad$ Whitehal |  | Ogden <br> VERMONT. | $1,2,3$, and 4. |
| Yonkers |  |  |  |
| Asheville |  | St. Johnsbury | 6 and \% |
| OH | 3 and 4. | Viliginia. |  |
| Akron -- | $\begin{aligned} & 7 \text { and } 8 . \\ & \text { All. } \end{aligned}$ | Petersburg .-.....- | High school. <br> $7,8,9$, and 10 . |
| Cleveland |  |  |  |
| Daytoil | 7 and 8. <br> $1,2,3,4,5$, and 6 . <br> $5,6,7$, and 8. <br> High school. | Staunton $\qquad$ WASHINGTON. |  |
| Toledo - |  |  |  |
| Youngstown. |  |  |  |
| PENNSYLVANIA. |  | Seattle | Figls school. |
| Bradford - | 8, 9, 10, 11, and 12. |  |  |
| Conshohorken | All above primary. | Wisconsin. |  |
| Norristown- | 7 and high school. High school. | Appleton | High school. |
| Pittswurg ............ | Grammar school. | Chippewa Fall | Primary. |
| West Cliester....... | $8,9,10,11$, and 12 . | Eau Claire. | \%.8 and high school. |
| RHODE ISLAND. |  | Fond di Lac.-. | High school. |
| Newport...---....-. | Intermediate, grammar, and high schools. | Janesvilie....-.-.------ | All. Do. |
|  |  | Milwaukee <br> Oshkosh | 'Two high schools. $5,6.7,8,9,10,11$, and 12. High school. |
| Providence | High school. |  |  |
| W oonsocket | 7, 8, and 9. | Portage |  |

Table 3.-Summary of statistics of mamial and industrial training schools in the United States in 1899-1900.

| State ol Territory. |  | Different teachers of manual and industrial training. |  |  | Different pupils who received manual and inAustrial training. |  |  | Expenditure for manual and industrial craining during 1899-1900 for 106 schools. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \dot{9} \\ & \text { 感 } \end{aligned}$ |  | F. ¢ - |  | \% | Fin |  |  |  |  |  |
| United States <br> North Atlantic Division South Atlantic Division. South Central Division.North Central Division. Western Division. | 144 | 61.2 | 587 | 1,199 | 25.7541 | 15,98: | 41, 436 | \$วั\%, \%81 | 894, 405 | 842, 86.2 | 555, 070 | 3766, 121 |
|  | 55 | 283 | 253 | 535 | 12, 814 | 7,812 | 20,686 | 254, 441 | 42,538 | 11,288 | 41, 497 | 319, 770 |
|  | 19 | 68 | 38 | 105 | 1,404 | 610 | 2, 014 | 20, 240 | 8,436 | 3, 954 | 1,859 | 41,189 |
|  | 11 | 33 | 59 | 92 | - 902 | 778 | 1,770 | 21, 820 | 4,980 | 1,175 | . 650 | 31, 675 |
|  | 3.5 | 139 | 139 | $2 \% 8$ | 6,531 | 4,206 | 10, 73 | 154, $1 \%$ | 22, 680 | 81. 400 | 7, 831 | 206,188 |
|  | 24 | 90 | 98 | 188 | 3,933 | 2,566 | 6,529 | 113, 300 | 15, 271 | 5,045 | 3,233 | 137,299 |
| North Atiantic Division: <br> Massachusetts $\qquad$ <br> Rhode Island $\qquad$ <br> Connecticut $\qquad$ <br> New York. $\qquad$ <br> New Jersey $\qquad$ <br> Pennsylvania $\qquad$ | 9 | 51 | 73 | 121 | 2,368 | 1,151 | 3, 519 | 4.3. 199 | 2,888 | 704 | 110 | 48,881 |
|  | 7 | 27 | 18 | ${ }^{4} 5$ | 1,0.38 | 890 | 1,918 | 12, 240 | 200 | 25 | 15 | 13, 080 |
|  | 4 | 6 | 30 | 36 | -352 | 510 | 852 | 7,210 | 185 | 0 | 100 | 7,495 |
|  | 22 | 113 | 70 | 183 | 5, 608 | 4,0.53 | 9, 261 | 108, 644 | 14,86\% | 4, 209 | 34, 564 | 162, 784 |
|  | 3 | 9 | 15 | $2 \pm$ | 114 | 165 | 219 | 11,810. | 2, 600 | 3,600 | 2,000 | 20,040 |
|  | 10 | 76 | 47 | 123 | 3, 404 | 1,043 | 4, 442 | 68,714 | 21,818 | 2,250 | 4,708 | 97, 490 |
| Soutin Atlantic Division: <br> Delaware <br> Maryland. <br> District of Columbia. <br> Virginia <br> North Carolina <br> South Caiolina <br> Georgia. | 2 |  | 1 |  |  | 0 |  | 2, 8 C0 | 370 | 5 | 33 | 3,278 |
|  | 7 | 37 | 5 | 42 | 858 | 178 | 1,036 | 6, 715 | 1,094 | $6 \pm 5$ | 126 | 8,581 |
|  | 2 | 3 | 8 | 11 | 38 | 77 | 115 | 1,500 | 2,767 | 273 | 50 | 4, 590 |
|  | 1 | 6 | 5 | 11 | 115 | 65 | 180 | 10,000 | 3,000 | $\stackrel{2}{2}, 000$ | 1,500 | 16,500 |
|  | 5 | 7 | 16 | 23 | 209 | 220 | 429 | 3,100 | 910 | 210 |  | 4,2:20 |
|  | 1 | 5 | 1 | 6 | 100 | 20 | $1 \cong 0$ | 1,600 |  |  |  | 1,600 |
|  | 1 | 2 | $\ldots$ | 4 | 25 | 50 | \% 5 | 1,0:5 | 495 | 750 | 150 | 2,420 |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky -............ | 3 | 9 | 3 ก | 46 | 379 | 431 | 810 | 6,950 | 1,080 | 575 | 450 | 9,055 |
| Tennessee | 1 | 4 | 3 | 7 | 20 | 30 | 50 | 600 |  | 100 |  | 700 |
| Alabama | 1 | 3 | 0 | 3 | 16 | 0 | 16 | 1,000 | 2,500 |  |  | 3,500 |
| Louisian | 1 | 2 | 0 | 2 | 200 | 0 | 200 | 50 | 200 | 100 | 200 | 1,000 |
| Texas | , | 0 | 5 | 5 | 0 | 20 | 20 |  |  |  |  |  |
| Oklahorna | 4 | 15 | 14 | 89 | $37 \%$ | 297 | $6 \% 4$ | 15, 8 \% | 1,200 | 400 |  | 17, 420 |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio-. | 5 | 25 | 13 | 38 | 1,3\%8 | 599 | 1,97\% | 32.45 | 6,520 | 2,350 | 2, 600 | 44, 081 |
| Indiana | 2 | 17 | 9 | 26 | , 563 | 505 | 1,071 | 17, 550 | 1,090 | 309 | 100 | 19, 040 |
| Illinois | 7 | 31 | 13 | 44 | 1,937 | 654 | 2, 5.1 | 149, 585 | 5,380 | ? 25 | 625 | 26, 235 |
| Michigan | 4 | 9 | 30 | 39 | 410 | 559 | 969 | 10, 787 | 3,2\%1 | 8,519 | 3,155 | 25, 732 |
| Wisconsin | 4 | 6 | 18 | 24 | 123 | 312 | 435 | 3,250 | 1,100 | 175 | $2 \pi 6$ | 4,801 |
| Minnes | 1 | 3 | 2 | 5 | 318 | 96 | 414 | 5,500 | 729 |  |  | 6,289 |
| Iowa | 1 | 1 | 1 | 2 | 95 | 17 | 112 | 2,800 | 200 | 20 | 125 | 3,150 |
| Intissouri | 2 | 11 | \% | 18 | 760 | 698 | 1,453 | 15, 140 | 2,100 | 9,000 | 700 | 27, 030 |
| North Dakota | , | 11 | 12 | 83 | 216 | 253 | 499 | 2,100 | 400 |  | 100 | 2,600 |
| South Dako | 5 | 12 | 30. | $4{ }^{4}$ | 323 | 288 | 611 | 15,010 | 1,800 | 300 | 150 | 17,260 |
| Kansas | , | 13 | 4 | 17 | 375 | 225 | 609 |  |  |  |  |  |
| Western Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana | 1 | 8 | 9 | 17 | 184 | 130 | 314 | 9, 410 |  |  |  | 9,440 |
| Colorado | 5 | 21 | 21 | 45 | 1,330 | 313 | 1, 293 | 23,5\% | 305 |  |  | 24,500 |
| New Mexic | , | 11. | 11 | $2:$ | 413 | 209 | 623 | 12.712 | 1,200 | 390 |  | 14, 302 |
| Arizona | 5 | 1.3 | 21 | 36 | 38. | 286 | 6.1 | 23,730 | 2,000 | 1,000 |  | 23,730 |
| Nerada | , | 2 | 3 | 5 | 60 | 49 | 101 | 2,940 |  |  |  | 2,940 |
| Idaho | 1 | 3 | 5 | 8 | 20 | 15 | 35 |  |  |  |  |  |
| Oragen |  |  |  |  |  |  |  |  |  |  |  |  |
| California | 9 | 32 | $\cdots 2$ | 54 | 1, 361 | 1.583 | 3,144 | 44,:03 | 11,366 |  |  | 62, 387 |

TABLE 4.-Statistics of manual and industrial schools in the United States in 1899-1900.


TABLE 4．－－Statistics of manual and industrial schools in the United States in 1899－1900—Continued．

| Location． | Name of institution． | President or director． | Grade of liter ary instruc tion． | Different teachers of industrial training． |  |  | Different pupils who receive in－ dustrial training． |  |  | Expenditure for industrial training during 1899－1900． |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { 采 } \\ \text { 品 } \end{gathered}$ | \％ | $\begin{gathered} \text { cien } \\ \text { Hi } \\ \text { E-1 } \end{gathered}$ | $\stackrel{\oplus}{\underset{\sim}{\sim}}$ | 息 | $\begin{aligned} & \text { Bi } \\ & \text { Hi } \end{aligned}$ |  |  |  | 篤 | － |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | \％ | （1） | 10 | 11 | 18 | 13 | 14 | 15 |
| marytand． |  |  | Elementary <br> Elementary and sec－ ondary． Elomentary | 20 | ［ $\begin{array}{rrr}0 & 3 \\ 0 & 20\end{array}$ |  | 40$38 \%$ | 0000 | 40387 | \＄860 | \＄500 | \＄160 | ．．．．． | \＄1，520 |
| Aroutus | Baltimore Manual Labor School | G．W．Lärman ${ }_{\text {Wm．}}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Baltimore | Baltimore Polytechnic Institute |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Industrial Training Dept．of House of Refuge．＊ <br> St．Mary＇s Industrial School | Joshua Levering |  |  | 0 | ） 3 | 125 |  | 125 | $\begin{array}{r} 2,200 \\ 105 \end{array}$ |  | $200$ | $\begin{array}{r} \$ 100 \\ 21 \end{array}$ | 3，000 |
| Do． |  | Brother Dominic， superintendent． | Elementary <br> and sec |  | 0 | 3 | 30 |  | 30 |  | 76 | $3{ }^{3}$ |  | 239 |
| Do．．．．．．－．．．．．．．．．．．．． | The Samuel Ready School ．．．．．．．．．．．－ | Miss Helon J．Rowe S．T．Moreland | do．． |  |  | $\stackrel{\square}{0}$ | $1: 0$ | 380 | 33140 | 1，000 |  |  |  | 1,000$2,8 \% 2$ |
| McDonough ．－．．．．．．．－．．．． | McDonougl Educational Fund and Institute． |  |  |  |  |  |  |  |  |  |  | 249 | －．．．－－ |  |
| Port Deposit ．－．．．－－．．．．．．． |  | James Cameron Mac－ kenzie． | Secondary－．－ |  | 3 | 5 | 136 | 140 | 276 | 2，550 | 18 |  |  |  |
| massachusetts． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Boston（Roxbury）．．．．．－ | Friendford Industrial School Hebrew Industrial School． | Mrs．Henry Hinckley Mrs．J．H．Hecht ．．．．．． Chas．W．Parmenter Mrs．Quincy A．Shaw ． | Elementary | 5 | $\begin{aligned} & 30 \\ & 1: \end{aligned}$ | 35 | 5050 | $800$ | 250 | 300 | 50 | 10 | 10 | $3 \%$ |
| Boston（17 Allen street）．． |  |  |  |  |  | 20 |  |  |  |  |  |  |  |  |
| Boston Boston（39 Bennet street） | Mechanic Arts High School－－．．．．．．－ |  | secondary Elementary |  | ${ }_{8}^{11}$ | ， |  | 183 | 1.106 | $10,51.29$4,59 | $\left.\begin{array}{\|c\|c\|} 1,300 \\ 402 \end{array} \right\rvert\,$ | $\begin{aligned} & 200 \\ & 189 \end{aligned}$ | 100 | $15,21 \%$5,150 |
| Boston（39 Bennet street） | North Bennet Street Industrial School． |  |  |  |  | 811 | 923 |  | 1，106 |  |  |  |  |  |
| Cambridge ．－－－－－－－－．．．．－ | Rindge Manual Training School | Charles H．Morse， head master． <br> Wm．Wyman Crosby－ Miss Louise Howe， president． <br> C．A．Johnson ．．．．．．．．－ <br> Charles F．Warner． | Secondary | $\%$ | 1 | 8 | $\because 00$ | 0 | 200 | 11，030 |  |  |  | 11，030 |
|  | Trustees of the Lowell Textile School |  | Collegiate．－．． | 12 |  | $\stackrel{12}{23}$ | $\begin{array}{r} 303 \\ 40 \\ \hline \end{array}$ | 260 | $\begin{aligned} & 311 \\ & 300 \end{aligned}$ |  | 586 | 300 |  | 14， 800 |
| Roxbury－－．－．－．－．－．．－－．．．－ | South End Industrial School ．．．．．．．．．． |  |  |  | 20 |  |  |  |  |  |  |  | －－－－－－ | $\begin{array}{r} 2,184 \\ 135 \end{array}$ |
| Salem | Pluminer Farm School |  | slementary Secondary ．－． | 1 | 1 | 1 | 14 | 0 | 14 | 100 | 30 |  |  |  |
| Springfield | Mechanic Arts Eigh School |  |  | 5. |  |  |  | 0 | 301 |  |  |  |  |  |





TABLE 4.-Siatistics of manual and industrial schoo's in the United States in 1899-1900-Continued.

T'able 5.-Industrial schools for Indian children, 1899-1900.

TABLE 5．－Industrial schools for Indian children，1899－1900－Continued．

| Location． | Name of institution． | President or director． | Grade of literary instruction． | Different teachers of industrial training． |  |  | Different pupils who received in－ dustrial train－ ing． |  |  | Expenditure for industrial training during 1899－1900． |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 家 | 圱 | W |  | 第 | $\begin{aligned} & \text { ت゙ } \\ & \text { ざ } \\ & \text { E- } \end{aligned}$ |  | 禺 |  |  | F－3 ＋ － |
| 1 | 2 | 2i | 4 | 5 | 6 | ＇g | 5 | 9 | 10 | 11 | 18 | 113 | 148 | 15 |
| MICHIGAN． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mount Pleasant <br> Pipestone $\qquad$ $\qquad$ | ```Mount Pleasant Indian Industrial School. Pipestone Indian Training School...``` | E．C．Nardin，super－ intendent． <br> Dewitt S．Harris，su－ perintendent． | Elumentary ．．．．－ | 2 3 | 5 9 | 7 | 68 68 | 63 $\% 0$ | 131 138 | 83，280 | 82， 000 | \＄150 |  | \＄5，430 |
| montana． <br> Fort Shaw（by Sun River）． | Fort Shaw Industrial School． | F．C．Campbell，su－ perintendent． | Elementary ．．．－－ | 8 | 9 | $1 \%$ | 184 | 130 | 314 | 9，440 |  |  |  | 9，440 |
| NEVADA． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Carson City NEW MEXICO． | Carson Indian Training School | James K．Allen，su－ perintendent． | Elementary ．－．－－ | 2 |  | 5 | 60 | 40 | 100 | 2，940 | －－－－－－ | －－－－－ |  | 2，940 |
| Albuquerque－－－－－－－－－ | United States Indian School－－－－－－－－－ | R．P．Collins | Elementary ．－．－－ | 8 | 6 | 14 | 188 | 129 | 317 | 7，440 |  |  |  | 7，449 |
| Santa Fe．．．－－．．．．．－－．．．．－ |  | C．J．Crandaill ．－．．．．．． | －．．．．do－－－－－－－－－－ | 3 | 5 | 8 | $2: 3$ | 80 | $3 \%$ | $5,2 \%$ | 1，200 | 390 |  | 6，862 |
| NORTH CAROLINA． <br> Cherokee $\qquad$ | Cherokee Training School－－－－－－－－－－ | Heary W．Spray ．．．． | Elementary－－－－ | 3 | 6 | 9 | 91 | 89 | 180 |  |  |  |  |  |
| NORTH DAKOTA． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Elbowoods | Brownin ¢ Boarding School ．．．．．．．．．． | Byron E．White ．．．．． | Elementary ．－．．－ | 4 | 4 | 8 | 56 | 48 | 104 |  |  |  |  |  |
| Fort Totten ．－－－．－．．．．－． | United States Indian Industrial School． | Wm．E．Canfield ．．．．．． | Secondary．．．．．．． | 6 |  | 1： | $1: 5$ | 100 | 225 |  |  |  |  | － |



Table 6.-Statistics of manual and industrial training--Branches taught.

| Name of institution. | Branches of instruction. | Number of instructors. | Number of pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { ఱ. } \\ & \text { ష్ష్ } \\ & \text { ¢ } \end{aligned}$ |  |
| 1 | 2 | 3 | 4 | 5 | 6 |
| The Southern Industrial College, Camp Hill, Ala. | Carpentry Farm or garden work. | 1 | 5 9 | 0 0 |  |
|  | Farm or garden work Printing | 1 | $\stackrel{9}{2}$ | 0 |  |
| Central Schooì (public), Oakland, Cal .... | Mechanical drawing | 1 | , | 0 |  |
|  | Sewing | 1 | 0 | 1 | 42 |
|  | Cooking Carpentry | 1 | ${ }_{1}^{0}$ | 1 | ${ }_{21}^{42}$ |
|  | Wood turning | 1 | 1 |  | 21 |
|  | Carving-..... | 1 | 1 |  | 21 |
| California School of Mechanical Arts, San Francisco, Cal. | Free-hand drawing | 2 | 180 | 65 | 40 |
|  | Mechanical drawing | 1 | 180 | 65 | 40 |
|  | Clay modeling-... | 1 | 100 | 31 | 40 |
|  | Sewing .-.-.... | 1 |  | 74 14 | 40 |
|  | Wood turning | 1 | 100 |  | 40 |
|  | Pattern making | 1 | 100 |  | 40 |
|  | Forging-....... | 1 |  |  | 30 |
|  | Molding (metal) | 1 | 77 <br> 54 <br> 1 |  | 10 10 |
|  | Machine-shop work | 1 | 63 |  | 70 |
| Cogswell Polytechnical College, San Francisco, Cal. | Free-hand drawing | 1 | 34 | 59 | 120 |
|  | Mechanical drawing | 1 | $3 \pm$ | 30 | 120 |
|  | Sewing.-.------.- | 1 |  | 89 15 | ${ }_{20}^{85}$ |
|  | Carpentry | 1 |  |  | 80 |
|  | Wood turning. | 1 | 34 |  | 24 |
|  | Pattern making | 1 | 25 |  | 20 |
|  |  | 1 | 34 |  | 20 |
|  | Molding (metal) | 1 | 34 |  | 20 |
|  | Vise work $\qquad$ | 1 | 34 |  | 26 |
| Mechanics' Institute of San Francisco, San Francisco, Cal. <br> Polytechnic High School, San Francisco, Cal. | Free-hand drawing | 1 | 2 | 24 | 4 |
|  | Mechanical drawing | 1. | 17 |  | 44 |
|  | Free-hand drawing. | 1 | 60 60 | 120 2 | 120 |
|  | Clay modeling..... | 1 |  | 50 | 80 |
|  | Carpentry | , | 40 |  | 40 |
|  | Wood turning | 1 | 20 | 80 | 40 |
|  | Carving ....i-.... | 1 | 20 20 | 80 0 | 40 |
|  | Forging .-........ |  | 42 | 0 | 20 |
|  | Vise work | 1 | 20 | 0 |  |
|  | Machine-shop wor | 1 | 20 | 0 | 60 |
| AnnaS. C. Blake Manual Training School, santa Barbara, Cal. | Sewing-- | 1 | 0 | 1 | 160 40 |
|  | Sloyd.. | 2 | 0 | 2 | 200 |
| Preston School of Industry (boys), Waterman, Cal. | Cooking- | , | 9 | 0 | 26 |
|  | Carpentry | 1 | ${ }_{5}^{4}$ | 0 | 26 |
|  | Thailoring | 1 | 5 | 0 0 | 26 26 |
|  | Baking...... |  | 4 | 0 | 26 |
|  | Forging... | 1 | 5 | 0 | 26 |
|  | Drugs....... |  | 1 | 0 | 26 |
|  | Photography - | 1 | 1 | 0 | 26 |
|  | Futter making - .-..... | 1 | 8 20 | 0 0 | 26 26 |
|  | Farm or garden work Printing | 3 | 20 1 | 0 0 | $\stackrel{26}{26}$ |
|  | Electricity. | 1 | 9 | 0 | 26 |
|  | Laundry | 1 | 5 | 0 | 26 |
| The Brightside Educational Corporation, Denver, Colo. | Sewing.-. | 1 | 1 |  |  |
|  | Cooking.-. | 1 | 10 |  | --.... |
|  | Farpentry or garden | 3 | 60 |  |  |
|  | Printing ........ |  | 3 |  |  |
|  | Laundry | 1 | 18 |  |  |
|  | Shoemaking | 1 | 1 |  |  |

Table 6.-Statistics of manual and industrial training-Branches taught-Cont’d.

| Name of institution. | Branches of instruction. |  | Number of pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 1 | ${ }^{8}$ | 3 | 4 | 5 | 6 |
| Manual Training High School, Denver, Colo. | Free-hand drawing ..-.- | 1 | 195 | 186 | 114 |
|  | Mechanical drawing -- | 1 | 195 | 186 | 114 |
|  | Clay modeling -..... | 2 | 150 | 145 | 16 |
|  | Sewing --.... | 2 |  | 186 | 76 |
|  | Cooking .-. | 1 |  | 50 | 38 |
|  | Carpentry | 1 | ¢ 90 | 85 | 16 |
|  | Wood turning | 1 | $\left\{\begin{array}{l}90 \\ \hline\end{array}\right.$ | 85 | 10 |
|  | Carving-.-.-.-- | 2 | - 90 | 150 | 12 |
|  | Pattern making |  | 76 70 | ---- | 13 |
|  | Forging: Sheet-metal work | 1 | $\left\{\begin{array}{l}70 \\ 70 \\ 70\end{array}\right.$ | ------ | 18 4 |
|  | Molding (metal) - |  | (70 | ----- | 3 |
|  |  | 1 | $\left\{\begin{array}{l}45 \\ 45\end{array}\right.$ | .-.- | 8 30 |
|  | Machanical drawing | 1 | ( 50 | ----- | 5 |
| State Industrial School, Golden, Colo..... | Sloyd, or knife work | 1 | 5. |  | 52 |
|  | Carpentry ---- | 1 | 55 | .-.- | 5.2 |
|  | Carving--------- | 1 | 52 |  | 52 |
| Y. M.C.A. Trade School and Institute, Bridgeport, Conn. | Free-hand drawing-- Mechanical drawing | 1 | 19 | --- | 20 |
|  | Carpentry --.-.-..-- | 1 | 14 |  | 30 |
|  | Plumbing. | 1 | 13 |  | 30 |
| Boardman Manual Training High School, New Haven, Conn. | Free-hand drawing- | 2 | 240 | 160 | 40 |
|  | Mechanical drawing | 1 | 240 | 100 | 40 |
|  | Sewing - . | 1 |  | 160 | 40 |
|  | Cooking--. | 1 |  | 100 | 40 |
|  | Woodwork | 1 | 130 | 0 | 40 |
|  | Wood turning | 1 | 120 | 0 | 40 |
|  | Carving...-.-. | 1 | 0 | 160 | 40 |
|  | Pattern making |  | 55 | 0 | 40 |
|  | Forging---...--- | 1 | 30 | 0 | 40 |
|  | Machine-shop work | 1 | 20 | 0 | 40 |
| Manual Training School, Ridgefield, Conn. | Sewing....------- | 1 |  | 150 | 30 |
|  | Cooking: | 1 |  | 50 |  |
| Waterbury Industrial School, Waterbury Conn. | Sewing. | 25 | 0 | 200 40 | 30 20 |
| St. Joseph's Industrial School for Colored Boys, Clayton, Del. | Clay modeling | 1 | 4 | + | 20 |
|  | Carpentry --..-- --. | 1 | $\stackrel{2}{2}$ | 0 | -...-. |
|  | Farm or garden work | 3 | 12 | 0 | --... |
|  | Printing ... | 1 | 6 | 0 |  |
|  | Painting | 1 | 4 | 0 |  |
|  | Tajloring | 1 | 4 | 0 |  |
|  | Shoemaking -------- | 1 | ${ }^{3}$ | 0 |  |
| Ferris Industrial School, Marshallton, Del. | Free-hand drawing Mechanical drawing | 1 | 24 | ---- | 52 |
|  | Mechanical drawing Sewing. | 1 | 24 | --.-- | 5 |
|  | Cooking- | 1 | 4 |  | 52 |
|  | Carpenîry :-.--- | 1 | 21 | ----- | 52 |
|  | Wood turning | 1 | 24 |  | 52 |
|  | Farm or garden work | 4 | 50 |  |  |
| District of Columbia Industrial Home School, Washington, D. C. | Sewing Carpentry | 1 |  | 20 | -----.-. |
|  | Carpentry Floriculture | 1 | 13 | 0 | -------- |
|  | Farm or garden work | 1 | 9 |  |  |
| St. Rose's Industrial School, Washington, | Sewing ---------- | 6 | 0 | 54 3 | 36 52 |
| Fort Valley High and Industrial School, Fort Valley, Ga. | Cooking ---------- | 1 | 0 | ${ }^{3}$ | 52 |
|  | Mree-hand drawing ----. | 1 | 16 | 10 | - |
|  | Sewing | 1 |  | 50 |  |
|  | Cooking ............. | 1 |  | 30 |  |
|  | Carpentry | 1 | 30 |  | --...- |
|  | Wood turning..------ | 1 | 15 |  |  |
|  | Vise work -......-.-.-. | 1 | 238 |  |  |
| Chicago English High and Mlanual Training School, Chicago, Ill. | Free-hand drawing - | 7 | 578 | 0 | 120 |
|  | Mechanical drawing. | 3 | $5 \% 8$ | 0 | 130 |
|  | Carpentry --...- | 4 | 305 | 0 | 40 |
|  | W ood turning----.-.-...... | 4 | 305 | 0 | 40 |

Table 6.-Statistics of manual and industrial training-Branches taught-Cont'd.


Table 6.-Statistics of manual and industrial training-Branches taught--Cont'd. ;
$\qquad$
Name of institution.

Indiana Soldiers and Sailors' Orphans' Home, Knightstown, Inã.

West Des Mcines High and Industrial School, Des Moines, Iowa.

State Normal for Colored Persons, Frankfort, Ky. (Manual training.)

Hope Presbyterian Mission and Industrial School, Louisville, Ky.
Manual Training High School, Louisville, Ky.

Home Institute-Free nightschool-New Orleans, La.

Baltimore Manual Labor School, Arbutus, Md.

Baltimore Polytechnic Institute, Baltimore, Ma.

St. Mary's Industrial School, Baltimore,
Md.
$\frac{\text { Branches of instruction. }}{}$


Table 6.-Statistics of manual and industrial training-Branches taught-Contd.

| Name of institution. | Branches of iustruction. | Number of instructors. | Number of pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\stackrel{\text { 咸 }}{ }$ | 先 |  |
| 1 | 3 | :3 | 1 | 5 | 6 |
| St. Mary's Industrial School, Baltimore, Md.-Continued. | Machine-shop work | 3 | 7 | 0 | 40 |
|  | Farm or garden work | 4 | 10 | 0 | 40 |
|  | Bricklaying---....... | 1 | 3 | 0 | 40 |
|  | Printing ---- -- - | : | 18 | 0 | 40 |
|  | Painting - | 1 | 3 | ${ }^{0}$ | 40 |
| The Samuel Ready School, Baltimore, Md. | Free-hand drawing Clay modeling... | 1 | 0 0 | 15 |  |
|  | Paper cutting and folding |  |  | 15 |  |
|  | Sewing....... | 1 | 0 | 60 |  |
|  | Cooking-.... | 1 | 0 | 23 |  |
|  | Dressmakiog | 1 |  | 4 |  |
|  | Pipe organ...----- Piano | 1 | 0 | 13 | -. |
|  | Typewriting. | 1 | 9 | 21 |  |
|  | Shorthand -...-.-.-. | 1 | 0 | 5 |  |
| The McDonogh Educational Fund and Institute, McDonogh, Md. | Free-hand drawing | 2 | 125 | 0 | 40 |
|  | Mechanical drawing | 1 | 25 | 0 | 40 |
|  | Clay modeling --.. | 1 | 4 | 0 | 0 |
|  | Wood turning | 1 | 315 | 0 | 10 |
|  | Carsing-........ | 1 | 30 | 0 | 10 |
|  | Pattern making | 1 | 15 | 0 | 10 |
|  | Vise work -.......... | 1 | 15 | 0 0 | $\stackrel{5}{5}$ |
|  | Machine-shop work Farm or garden work | 1 | 15 80 | ${ }_{0}^{0}$ | 35 |
|  | Printing ....---...... | 1 | 29 | 0 | 51 |
|  | Free-hand drawing | 1 | 136 | 140 |  |
| Tome Institute, Por't Deposit, Md...-....... | Mechanical drawing |  | 58 |  |  |
|  | Paper cutting and folding | 1 |  | 9 |  |
|  | Cooking. | 1 |  | 90 |  |
|  | Sloyd or knife work | 1 | 78 |  |  |
|  | Wood turning ... | 1 | 18 |  |  |
|  | Pattern making | 1 | 5 |  |  |
| Friendford Industrial School, Boston, Mass. | Forging --.-......... | 1 | $\stackrel{8}{8}$ | 4 |  |
|  | Mechanical drawing |  | 2 | 4 |  |
|  | Paper cutting and folding |  |  | $\stackrel{2}{2}$ |  |
|  | Sewing <br> Coozing |  |  | 30 |  |
|  | Cooking <br> Slovd or knife work |  |  | $\stackrel{2}{2}$ |  |
|  | Carpentry .......... |  | 2 |  |  |
| Hebrew Industrial School, Boston, Mass... | Sewing-... | 8 |  | 400 | 50 |
|  | Cooking. | 2 |  | 50 | 50 |
|  |  | 2 |  |  | 14 |
| Mechanic Arts High School, Boston, Mass. | Free-hand drawing | 3 | $\left\{\begin{array}{l}487 \\ 48 \%\end{array}\right.$ |  | 10 |
|  | Carpentry -..... | 3 | 21: |  | 30 |
|  | Wood turning | 2 | 148 |  | 15 |
|  | Carving....... | 3 | 2178 |  | 10 |
|  | Pattern making | ${ }_{2}^{2}$ | 148 |  | 5 |
|  | Marchine-shop work | 1 | 126 |  | 40 |
| North Bennet Street Industrial School, Boston, Mass. | Clay modeling.. | 4 | 304 | 43 | 32 |
|  | Sewing.-... | 1 |  | 75 | 32 |
|  | Cooking -...- | 1 |  | 20 | 24 |
|  | cloyd or knife wor | 1 | 19.5 |  | 38 |
|  | Millinery --.- | 1 |  | 25 | 24 |
|  | Dressmaking | 1 |  | 20 | 24 |
|  | Printing ${ }^{\text {Free-hand }}$ drawing | 1 | 218 |  | 38 |
| Rindge Manual Training School, Cambridge, Boston. | Mechanical drawing | 1 | 200 | ${ }_{0}^{0}$ | 20 |
|  | Carpentry --.-.- | 1 | 100 | 0 | 40 |
|  | Wood turning -- | 1 | 50 | 0 | 20 |
|  | Pattern making - | 1 | 50 | 0 0 | ${ }_{20}^{20}$ |
|  | Forging--........- | 1 | 50 | 0 0 | 40 |

TABLE 6.-Statistics of manual and incustrial traiming—Branchestarght-Cont-d.


Table 6.-Statistics of manual and industrial training-Branches taught-Cont'd.

| Name of institution. | Branches of instruction. |  | $\begin{gathered} \text { Number of } \\ \text { pupils. } \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 采 |  |  |
| 1 | 8 | 8 | 4 | 5 | 6 |
| Manual Training School of Washington University, St. Louis, Mo.-Continued. | Molding (metal) Vise work | 1 | 81 48 | 0 |  |
|  | Machine-shop work | 1 | 48 | 0 |  |
| Manual Training and Industrial School, | Free-hand drawing | 1 | 14 15 | 27 | 34 |
| Bordentown, N. J. | Mechanical drawing | 1 | 15 | 33 | 24 <br> 96 <br> 9 |
|  | Cooking. |  |  | 20 | 96 |
| Baron de Hirsch Agricultural and Industrial School, Woodbine, N.J. | Carpentry | 1 | 30 |  | 96 |
|  | Mechanical drawing | 1 | 13 | 0 | 24 |
|  | Cooking-.. | 1 | 16 |  | 48 44 |
|  | Forging -- | 1 | 16 | 0 | 24 |
|  | Machine-shop work | 1 | 16 | 0 | 24 |
|  | Farmor garden worb | ${ }^{6}$ | 86 | 0 | $1: 2$ |
| Bartow School of Industrial Arts, Binghamton. N. Y. | Painting ---...-.... | ${ }_{1}^{1}$ | 16 | 0 0 | 24 40 |
|  | Serving .-..........- | 1 | ${ }_{0}$ | 17 | 20 |
|  | Cooking | 1 | 0 | 155 | 40 |
|  | Carpentry | 1 | 98 | 0 | 20 |
|  | Wood turning | 1 | 15 | 0 | 20 |
|  | Forging -a.-....-. | 1 | 31 | 0 | 40 |
| Industrial School Association of Brooklyn (E.D.). | Free-hand drawing Paper cutting and folding |  | 30 | 40 1 | 40 |
|  | Sewing --................... | 8 |  | 100 | 40 |
|  | Chair caning--..-- | 1 | 12 |  |  |
| Manual-Training High School, Brooklyn, N. Y. | Free-liand drawing | 3 | 502 | 588 | 160 160 |
|  | Clay modeling-- | 1 | ..... | 195 | 20 |
|  | Sewing .-. |  |  | 484 | 120 |
|  | Carpentry --.. | 3 | 245 |  | 20 |
|  | Wood turning | 2 | 143 | - | 20 |
|  | Carving -.... | 2 | 50 | 18 | 20 20 |
|  | Forging . | 1 | $1 \% 6$ |  | 40 |
|  | Sheet-metal work | 2 | 50 | 114 | 20 |
|  | Printing --......... | 2 | 58 |  | 40 |
| Pratt Institute High School, Brooklyn, N. Y. | Free-hand drawing | 1 | 97 | 139 |  |
|  | Sewing..............- | 3 | 0 | 52 |  |
|  | Cooking | 1 | , | 24 |  |
|  | Carpentry - |  |  |  |  |
|  | Wood turning Carving | 1 | 47 | 63 | ---.- |
|  | Pattern makiog | 1 | 20 | 0 |  |
|  | Forging-...... | 1 | 7 | 0 |  |
|  | Sheet-metal worl | 1 | 7 | 0 |  |
|  | Molding (metal) |  | 7 | 0 |  |
|  | Machine-shop w | 1 |  | 0 |  |
| Cornwall on the Hudson High School, Cornwall on the Hudson, N. Y. | Mechanical drawing | 1 |  | 2 | 32 |
|  | Carpentry --... | 1 | 18 | $\stackrel{2}{0}$ | 32 |
| Artist Artisan Institute, New York, N. Y. | Wreod turning -..... | 8 | 18 8 | $\stackrel{2}{0}$ | 32 |
|  | Painting in oil | ${ }_{2}^{8}$ | $\stackrel{8}{2}$ | 0 |  |
|  | Painting in water color. |  | 2 | 0 |  |
|  | Clay modeling-......... | 1 | 1 | , |  |
|  | Design and decoration. | 1 | 1 | 0 |  |
|  | Architecture -............. | , | -1 | 0 |  |
| Baron de Hirsch Trade School, N ew York, N.Y. | Mechanical drawing-..... House and sign painting. | 4 1 | 78 | 0 0 0 | 24 |
|  | Carpentry ..............- | 1 | 16 | 0 | 24 |
|  | Plumbing | 1 | 34 | 0 | 24 |
|  | Machine-shop work.-.... | 1 | 28 |  | 24 |
| The Ethical Culture Schools, New York, N. Y. | Free-hand drawing .-..... | $\stackrel{2}{2}$ | 78 | 154 <br> 154 | 37 37 |
|  | Paper cutting and fold |  | 78 | 80 | 37 |
|  | Sewing .... | 1 | 72 | 154 | 37 |

Table 6.-Statistics of manual and industrial training-Branches taught-Cont'd.

| Name of institution. | Branches of instruction. | Number of instructors. | Number of pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \frac{0}{3} \\ & \frac{\pi}{4} \end{aligned}$ |  |  |
| 1 | 5 | : 8 | 4 | 5 | 5 |
| The Ethical Culture Schools, New York, N. V.-Continued. | Venetian ironwork <br> Basketry <br> Weaving | 1 1 1 | 18 40 48 | 50 60 | 37 37 |
| General Society of Mechanics and Trades- | Free-hand drawing | 2 |  | 0 | 37 |
| men of New York City, New York, N.Y. | Mechanical drawing Clay modeling . | 3 |  | 0 0 |  |
|  | Architectural drawing | 2 |  | 0 |  |
| Hebrew Technical Institute, New York, | Free-hand drawing .-. | 1 | 181 | 0 | 144 |
| N.Y. | Mechanical drawing | 1 | 181 | 0 | 144 |
|  | Carpentry | 3 | 181 | 0 | 148 |
|  | Wood turning | 1 | 103 | 0 | 96 |
|  | Carving-.......... | 1 | 84 | 0 0 | 48 |
|  | Sheet-metal work | 1 | 38 | 0 | 48 |
|  | Vise work ........ | 1 | 64 | 0 | 43 |
|  | Machine-shop work | 1 | 38 | ${ }^{0}$ | 48 |
|  | Physics - |  | 181 | ${ }_{0}$ | 96 |
|  | Electricity --....... | 1 | 38 350 380 | 0 | 48 |
| The New York Catholic Protectory, New York, N. Y. | Mechanical drawing | 1 | 300 |  |  |
|  | Clay modeling.... |  |  | 100 |  |
|  | Paper cutting and folding | 1 | 13 | 100 | 52 |
|  | Sewing -- |  | 130 | 250 | 5 |
|  | Cooking -----..--- | 4 | 18 | 24 | 53 |
|  | Carpentry --...... | 1 | 15 |  | 5 |
|  | Sheet-metal work | 1 | 18 |  |  |
|  | Molding (metal) |  | 5 |  | 5 |
|  | Vise work | 1 | 5 |  | $5 \%$ |
|  | Machine-shop work | 1 | 5 |  | 52 |
|  | Farm or garden wor <br> Bricklaying. | 1 | $\stackrel{3}{5}$ | --- |  |
|  | Printing .--.-- | 5 | 85 |  |  |
|  | Painting | , | 12 |  |  |
|  | Dressmaking - |  | 70 | 125 |  |
|  | Shirt making |  |  | 160 |  |
|  | Tie making |  |  | 50 |  |
|  | Lace making. |  |  | 1.00 |  |
|  | Brush making |  | 300 | 300 |  |
|  | Blacksmithing ---- |  | 8 |  |  |
| New York Trade School, New York, N. Y. | Mechanical drawing |  | 16 |  |  |
|  | Carpentry .-.-.- |  | 26 | 0 | 39 |
|  | Electrical work | 4 | 83 | 0 | 39 |
|  | Plumbing -1.-.-.-.-.-.-...- | 5 | 274 | 0 | 39 |
|  | Forging.....--......- | 1 | 14 | 0 | 39 |
|  | Sheet metal .-...- | 3 | 38 | 0 | 39 |
|  | Plastering .....---.-.-.-.-.-. | 1 | 11 | 0 | 39 |
|  | Bricklaying ------.--------- | 2 | 63 | 0 | 39 |
|  | Printing -... | $\stackrel{2}{2}$ | 16 | 0 | 39 |
|  | Painting, house | 1 | 18 | 0 | 39 |
|  | Painting, fresco | 2 | 31 | 0 | 39 |
|  | Tinsmithing - |  | 12 |  |  |
|  | Knitting (stocking) |  |  | 120 |  |
|  | Laundry ..-.-------------- |  |  | 12 |  |
|  | Electrotyping <br> Electric lighting |  | 5 |  |  |
|  | Tailoring -.....- |  | 130 |  |  |
|  | Photography |  | 5 |  |  |
|  | Chair caning .... |  | 200 | 100 |  |
| Public Evening School No. 13, New York, N. Y | Sewing -........ <br> Cooking | 2 | 0 | 101 | ${ }_{24}^{24}$ |

Table 6.-Statistics of manual and industrial training-Branches tanght-Cont d.


TAble 6.-Statistics of manual and industrial training-Branches taught-Cont'd.


Table 6.-Statistics of manual and industrial training-Branches taught-Cont'd.


Table 6.-Statistics of manual and industrial training-Branches taught-Cont゚d.


Table 6.-Statistics of manual and industrial training-Branches taught-Cont d.

| Name of institution. | Branches of instruction. | s.ıoұәn.ıұsu! јо .zәqumn | Number of pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 |
| United States Indian School, Phoenix, Ariz.-Continued. | Cooking | 2 | 10 | 50 | 40 |
|  | Sloyd | 1 | 30 | 30 | 40 |
|  | Carpentry | 1 | 15 |  | 120 |
|  | Wood turning | 1 | 12 |  | 40 |
|  | Carving.... - | 1 | 1: |  | 40 |
|  | Farm or garden work | 3 | 24 | ----- | 80 |
|  | Bricklaying ............ | 1 | 6 |  | 80 |
|  | Painting --.....-. | 1 | 12 |  | 80 |
| Fort Yuma Training School, Yuma, Ariz. | Free-hand drawing . Clay modeling. | 3 | 1 | $\stackrel{2}{1}$ | 120 40 |
|  | Paper cutting and folding |  |  | 1 | 40 |
|  | Sewing------------------- |  |  | 2 | 200 |
|  | Cooking. |  |  | 3 | 200 |
|  | Carpentry |  | 1 |  | 120 |
|  | Shoemaking |  | 1 |  | 160 |
|  | Plastering -- |  | 1 |  |  |
|  | Farm or garden work |  | 1 |  | 120 |
|  | Painting ----.------- |  | 1 |  | 40 |
| Greenville Indian Training School, Greenville, Cal. | Sewing.- | 1 |  | 38 | 40 40 |
|  | Carpentry . | 1 | 25 |  | 40 |
|  | Farm or garden work | 1 | 25 |  | 40 |
| Indian School, Perris, Cal .........-...-.-...- | Sewing.-.-...-. .-.... - | 2 |  | 105 | 44 |
|  | Cooking. | 2 |  | 105 | 44 |
|  | Sloyd, or knife work |  | 12 | ----- | 44 |
|  | Carpentry ---.-.-.-- | 1 | 20 |  | 44 |
|  | Wood turning --. | 1 | 8 | -.... | 44 |
|  | Carving.-... |  |  | -.-.-- | 44 |
|  | Engineeling | 1 | 6 | ----- | 44 |
|  | Shoemaking | 1 | 12 | ------ | 44 |
|  | Cabinet and furniture | 1 | 8 | -....- | 44 |
|  | Forging -... | 1 | 4 | ----- | 44 |
|  | Vise work ----.---...... |  | 8 | ----- |  |
|  | Farm or garden work.- | 1 | 80 | ---- | 44 |
|  | Painting ----------- | 1 | 4 |  | 44 |
|  | Laundry .-. | 1 |  | 70 | 44 |
|  | Housework .-..-. |  |  | 103 | 44 |
| Grand Junction Indian Training School, Grand Junction, Colo. | Free-hand drawing .-..... | 4 |  |  |  |
|  | Paper cutting and folding | 1 |  |  |  |
|  | Sewing ------------------- | 2 | $\because$ | 20 | ----. |
|  | Cooking-.. | 1 | 8 | 4 | ---... |
|  | Carpentry --.-.-...-..... | 1 | 6 | -.-.-- | ------ |
|  | Farm or garden work - | 1 |  |  |  |
|  | Painting ---- -- - | $\frac{1}{1}$ | 2 |  | ------ |
| Fort Lapwai Indian Industrial School, Lapwai, Idaho. | Sewing Cooking - | 1 | ------- | 15 | -------. |
|  | Farm or garden work | 3 | 20 |  |  |
| Haskell Institute, Indian School, Lawrence, Kans. | Free-hand drawing ... | 1 | 150 | 100 | 120 |
|  | Mechanical drawing | 1 | 100 |  | 120 |
|  | Clay modeling ---------10 | 1 | 20 | 20 20 | 80 |
|  | Paper cutting and folding | 1 | 20 | 20 100 | 80 190 |
|  | Cooking | 2 |  | 160 | 120 |
|  | Sloyd, or knife work | 1 | 100 | -...- | 80 |
|  | Carpentry --.- | 1 | 25 | -.---- | 120 |
|  | Wood turning -- | 1 |  |  |  |
|  | Wagon making | 1 | 12 |  | 120 |
|  | Tailoring --. | 1 | 39 | 4 | 120 |
|  | Forging- ...- | 1 | 14 |  | 120 |
|  | Vise work. | 1 | 6 | --...- | 120 |
|  | Machine-shop work | 1 | 6 | ---... | 120 |
|  | Farm or garden work | 1 | 20 | -.-.-- | 120 |
|  | Bricklaying .-.-...- | 1 | 6 |  | 120 |
|  | Printing -.. | \% | 8 |  | 120 |
|  | Painting | 1 | 10 | , | 120 |
|  | Baking --.---.-. | 1 | 5 |  | 120 |
|  | Harness making. | 1 | 16 |  | 120 |

Table 6.-Statistics of manual and industrial training--Branches taught--Cont'd.

| Name of institution. | Branches of instruction. |  | Number of pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 1 | 3 | 8 | 4 | 5 | 63 |
| Mount Pleasant Indian Industrial School, Mount Pleasant, Mich. | Free-hand drawing. | 4 |  |  |  |
|  | Paper cutting and folding- | , | 15 | 10 | 40 |
|  | Sewing ---.---..-- - - - |  |  | 39 | 52 |
|  | Cooking. | 3 | 3 | 32 | 52 |
|  | Carpentry --.......-.-....... | 1 | 3 8 0 | 0 | 52 |
| Pipestone Indian Training School, Pipestone, Minn. |  | 2 | 10 | 70 |  |
|  | Cooking | 2 | 6 | 40 |  |
|  | Housekeeping -....... | 8 | 10 | 70 |  |
| Fort Shaw Industrial School, Fort Shaw, Mont. | Fram or garden wori .-.....- | $\stackrel{2}{6}$ | -68 | 130 | 20 |
|  | Paper cutting and folding .-. | 1 | 135 | 37 | 8 |
|  | Sewing ........ .-..-- .-. - .-... | 1 | 0 | 130 | 4 |
|  | Cooking-----...... | 2 | ${ }_{8}^{0}$ | 75 | 8 |
|  | Sloyd, or knife work Carpentry - .-..... | 2 | 80 10 | 0 0 | 40 |
|  | Carving.-. |  | [ 10 | 0 | 20 |
|  | Shoe and harnes making .-.- | 1 | 12 | 0 | 20 |
|  | Tailoring ---.............-...-- | 1 | 20 | 4 | 30 |
|  | Housekeening and mending | 4 | 0 | 100 | 40 |
|  | Sheet-metal work Vise worl. | 1 | 8 | 0 | 40 |
|  | Dining-room work .-...----..- | 1 | 0 | 100 | 8 |
|  | Farm and garden work....... | 2 | 36 | 0 | 40 |
|  | Laundry work .-...-.......... | 2 | 125 | 100 | 8 |
| Carson Indian Training School, Carson, Nev. | Free-hand drawing. | 4 | 60 48 | 40 |  |
|  | Clay modeling.....- | ${ }_{1}^{2}$ | 45 | $\stackrel{20}{9}$ |  |
|  | Paper cutting and folding. | 1 | 19 | 9 |  |
|  | Sewing - - - - --.......-- - - - - | 1 |  |  | - |
|  | Cooking.. | 1 |  |  |  |
|  | Forging | 1 | $\stackrel{2}{3}$ | 0 |  |
|  | $\checkmark$ Vise work | 1 | 10 | 0 |  |
|  | Machine-shop work | 1 | 10 | 0 |  |
|  | Farm or garden work | 1 | 20 | 0 |  |
|  | Printing -...-- | 1 | 4 | 0 |  |
|  | Painting-7.....-.-.....-- | 1 | 10 | 0 |  |
| United States Indian School, Santa Fe, N. Mex. | Sewing.......--............-- | $\frac{1}{2}$ |  | 3 |  |
|  |  | 2 | 4 |  |  |
|  | Sloyd, or knife work | 1 | 40 |  |  |
|  | Carpentry | 1 |  |  |  |
|  | Carving. | 1 | 12 |  |  |
|  | Tailoring | 1 | 15 |  |  |
|  | Baking --.-- | 1 | 8 |  |  |
|  | Shoemaking | 1 | 12 |  |  |
|  | Forging .-. |  |  |  |  |
|  | Sheet-metal work |  | 7 |  |  |
|  | Molding work ...... | 1 | 7 |  |  |
|  | Machine-shop work |  |  |  |  |
|  | Farm or garden work | 1 | $\stackrel{4}{4}$ |  |  |
|  | Ergineering -.......... | 1 | 10 | 10 |  |
| Browning Boarding School (Indian), Elbowoods, N. Dak. | Mechanical drawing -.........- | 1 | 56 |  |  |
|  | Paper cutting and folding-- | 1 | 16 | 14 |  |
|  | Sewing --------..-- -- | 1 |  | 36 <br> 38 |  |
|  | Sloyd, or knife work | 1 | 30 |  |  |
|  | Carpentry - ..... |  |  |  |  |
|  | Wood turning | 1 | 36 | -- |  |
|  | Tin work | 1 |  |  |  |

Table 6.-Statistics of manual and industrial training-Branches taught-Cont'd.


TABLE 6．－Statistics of manual and industrial training－Branches targht－Cont＇d．

| Name of institution． | Branches of instruction． |  | Number of pupils． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 发 | 㥻 |  |
| 具 | \＄ | 8 | 4 | 5 | ${ }^{6}$ |
| Oglala Boarding School，Pine Ridge， S．Dak． | Sewing <br> Cooking． <br> Farm or garden work <br> Printing | 2 2 2 1 1 | 50 4 10 | 50 | 40 40 40 40 |
| Pierre Indian Industrial School，Pierre， S．Dak． | Free－hand drawing |  | 121 | －－ |  |
|  | Clay modeling ．－．．－．fording |  | 40 70 | －－． |  |
|  | Paper cutting and folding |  | 70 | 20 |  |
| ＊ | Cooking ．．．．． |  |  | 30 |  |
| Tomah Indian Industrial School，Tomah，Wis． | Farmor garden woric．－－ |  | 16 |  |  |
|  | Sewing．－．．．－ | $\stackrel{2}{2}$ |  | 50 |  |
|  | Carpentry | I | 15 |  |  |
|  | Wood turning－－．．．．． | 1 | 15 |  |  |
|  | Farmor garden work | 2 | 45 |  |  |
| United States Indian Industrial School， Wittenberg，Wis． | Printing－－－－－．．．．．．．．． | 1 | 25 | － | 3 |
|  | Paper cutting and folũin | 1 | 12 | 1.5 | 21 |
|  | Sewing ．．．．．．－．．．．． | 1 |  | 59 | $5 \%$ |
|  | Cooking and baking | 2 |  | 40 | 48 |
|  | Farm or garden work． | 1 | 50 |  | 52\％ |

## CHAPTER XLI.

## COMMERCIAL ANI BUSINESS SCHOOLS.

In the last five years prominent business men of the country, as well as many leading educators, have manifested an increasing interest in the subject of business training, particularly in higher commercial education. Several universities now have departments of commerce, and many colleges offer business courses leading to degrees, while hundreds of public and private high schools have commercial courses parallel with the regular high-school courses. Many of the business and commercial schools have also extended and improved their courses of study. The progress of this movement was noted at some length in the Report of the Commissioner of Education for 1897-98, pages 2441-2461. The Report for 1898-99 published the recommendations of the committee of the depariment of business education of the National Educational Association on a course of study for commercial colleges, pages 2163-2174. In a preceding chapter of this Report (Chap. XXXV, pp. 1861-1871), under the head of "Higher commercial education," there are given synopses of commercial courses offered by a number of universities and colleges.

There are in the United States 4,393 institutions of various grades in which there were 186,048 students reported as pursuing commercial or business studies in the scholastic year 1890-1900. The number of each class of institution and the number of business and commercial students in each of the five classes may be seen from the following summary:

| Class of institution. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { schools. } \end{aligned}$ | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: |
| Universities and colleg'es. | 183 | 6,21; | 1, 741 | 7,953 |
| Public and private normal schools | 75 | 4,564. | 2,093 | 6, 657 |
| Private high schools and academies | 869 | 9,911 | 5,738 | 15, 649 |
| Public hight schools --.-..--.--- | 2, 893 | 33, 133 | 35, 757 | 68,890 |
| Commercial and business seliools | 373 | 58,396 | 33, 153 | 91,549 |
| Total | 4,393 | 112,216 | \%8,48\% | 190,698 |

Since 1889-90 the number of students pursuing business studies in commercial schools and other institutions has been subject to great fluctuation from year to year. Business depressions and reverses almost instantly affect this class of schools. In 1890 there were reported to this Office 103,914 students in commercial studies. There was a steady and rapid increase up to 1893-94, when the number reached 150,505 . Then there was a decine until $189 \%-98$, when the number was only 123,913. The next year there was an increase to 131,518 , and in 1899-1900 the number was 190,698 , a phenomenal increase of 59,180 in one year.

The following table is an exhibit of the number of students reported in commercial studies for each year from 1889-90 to 1899-1900:

Students pursuing commercial studies.

| Scholastic year. | In institutions not distinctly business schools. |  |  |  |  | In commercial and business schools. | Aggregate of students in commercial studies. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Universities and colleges. | Normal <br> schools. | Private high schools and academies. | Public high schools. | Total. |  |  |
| 1889-90. |  |  |  |  | 24,994 | 78, 920 | 103, 914 |
| 1890-91. |  |  |  |  | 36,564 | 81, 898 | 118,462 |
| 1891-92. |  |  |  |  | 27,254 | 77,856 | 105, 110 |
| 189\%-93. |  |  |  |  | 30,892 | 99,654 | 130,546 |
| 1893-94. | 7,300 | 7,771 | 4,466 | 15,220 | 34,757 | 115,748 | 150,505 |
| 1894-95. | 4,5\%7 | 5,293 | 8,819 | 25, 539 | 44, 228 | 96, 135 | 140,363 |
| 1895-96 | 5, 678 | 5, 375 | 9,889 | 30,330 | 51,2\%\% | 80, 662 | 131,984 |
| 1896-97. | 5,056 | 6,297 | 11,57t | 33,075 | 56,002 | ${ }^{77}, 746$ | 133, 748 |
| 1897-93 | 5,869 | 5,721 | 9,740 | 31,633 | 52,963 | \%0,950 | 123,913 |
| 1898-89 | 6, 463 | 6,126 | 10,609 | 38,134 | 61,332 | 70, 186 | 131,518 |
| 1899-1900 | 7,953 | 6, 657 | $15,6+9$ | 68,890 | 99.149 | 91,549 | 190,698 |

Tho above table indicates the progress made by high schools and colleges in meeting the demand for commercial education in this country. In 1889-90 these institations had less than 25 per cent of the students in business studies, while in 1899-1900 they had almost 52 per cent. While the number of students in business and commercial schools advanced from 80,185 in 1898-99 to 91,549 in 1899-1800, an increase of 21,363 , the number in ail other institutions increased 37,817, from 61,382 in 1898-99 to 99,149 in 1839-1900. The public high schools alone furnished 30,753 of this remarkable increase. In private high schools and academies the increase was 5,040, in normal schools 531, and in universities and colleges 1,490. It would seem that the public high school of the near future is to meet the greater part of the demand for instruction in the lower commercial studies, such as business arithmetic, bookkeeping, stenography, commercial geography, and commer_ cial law. It was ascertained by this Office in 1893-94 that there were 15,220 students in the public high schools pursuing some of these studies. In 1899-19c0 the number had reached 68,890 , an increase of over 342 per cent in six years. In 1893-94 the business and commercial schools reached the high-water inark when they reported 115,748 students. The lowest point reached was in 1838-99, when they reported 70,185 students; the 91,549 reported in 1899-1300 shows a phenomenal increase in one year, but the number is still 24.199 less than the number reportel six years before.

Table 1 gives the number of institutions of all grades in each State and Territory in which business and commercial studies were taught and the number of students in such studies in 1899-1900.

Table 2 gives the number of commercial students in universities and colleges in each State. The same table shows the number of such students in public and private normal schools in each State.

Table 3 summarizes by States the number of business and commercial students in private high schools and academies. The number of such students in the puiblic high schools in each State is given in the same table.

Table 4 is the first of a series of three tables summarizing the statistics of the 373 commercial and business schools reported to this Office for 1899-1900. These schools employed 2,112 instructors $-1,413$ men and 699 women. Of the 91,549 students enrolled, 58,396 were males and 33,153 females. Many of these institutions have both day and evening schools. The number of students enrolled in the day schools was 70,978 , the number of males being 44,456 , females 26,522 . The num-
ber of students in the evening schools of these institutions and not attending any of the day schools was 16,094 , the number of males being $11,18 \pi$, females $4,95 \%$, as shown in Table 5. A number of the schools reported only total enrollment, without dividing day and evening attendance.

Table 5 shows that the 373 commercial and business schools had had 11,936 graduates from commercial courses and 11,356 graduates from amanuensis courses duriug the year 1899-1900.

The number of students in each of four courses of study in each State, as reported by the $3 \% 3$ business and commercial schools, is shown in Table 6. The number of students in each course is summarized as follows:


In many of the schools several thousand students were pursuing more than one course of study, which accounts for the fact that the total in the above table exceods the total enrollment.

Tables 7 and 8 show the number of students in certain business strdies in the public high schools in each State and Territory. The number of public high schools maintaining regular business courses was 505 , with 21,253 students in such courses. In 2,913 schools there were 68,890 students in bookkeeping; in 451 schools, 13,235 students in commercial geography, andi in $43 \%$ schools. 9,326 students in commercial law. In 11 States there were 980 students in Spanish, not shown in these tables.

Table 9 fills the remainder of this chapter, giving in detail the statistics of the 373 business and commercial schools.

Table 1.-Number of institutions of all grades in which commercial and business studies were taught and number of students in such studies in 1899-1900.

| State or Territory. | Schools. | Students. |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Total. |
| United States. | 4,393 | 112, 216 | 78,482 | 190,698 |
| North Atlantic Division | 1,398 | 34, 786 | 26,709 | 61,495 |
| South Atlantic Division.. | 1345 408 | 8, 2688 | 5, 763 | 14, 1631 |
| North Central Division. | 1,985 | 50,350 | 35, 100 | 18,5,556 |
| Western Division..... | 1257 | 7,349 | 5,816 | 13,165 |
| North Atlantic Division: |  |  |  |  |
| Maine | 107 | 1,311 | 1,067 | 2,378 |
| New Hampshire | 57 | 599 | 279 | 878 |
| Vermont..... | $\begin{array}{r}55 \\ 202 \\ \hline\end{array}$ | 4, ${ }^{523}$ | $\begin{array}{r}468 \\ 4,875 \\ \hline\end{array}$ | ${ }_{9} 991$ |
| Rhode Island | 27 | +739 | +577 | 1,316 |
| Connecticut. | 79 | 1,648 | 1,670 | 3,318 |
| New York | 411 | 11, 786 | 7.717 | 19,503 |
| New Jersey | 110 | 3,521 | 2,346 | 5,667 |
| South Atlantic Division: |  |  |  |  |
|  |  |  |  |  |  |
| Delawaire -........... | 12 59 | 414 1,437 | 276 964 | 690 2,401 |
| District of Columbia | 20 | 1,418 | 1,598 | 3,016 |
| Virginia | 67 | 1,485 | 860 | 2,345 |
| West Virginia | 40 | 683 | 621 | 1,304 |
| North Carolina | 49 | 578 | 214 | 792 |
| South Carolina | 25 | 198 | 227 | 2 425 |
| Florida | 20 | 1,943 |  | 2,742 |
|  |  |  |  |  |
| Kentucky -----.-.-.... | 6.3 100 | $\xrightarrow{1,812}$ | $\begin{array}{r}658 \\ 1,298 \\ \hline\end{array}$ | $\stackrel{2,470}{3,826}$ |
| Alabama | 40 | 1,136 | -669 | 1,805 |
| Mississippi | 29 | 1,084 | 237 | 1,321 |
| Lotisiana | 28 | 1,113 | 269 | 1,382 |
| Texas .-- | 103 | 2,896 | 1,368 | 4,264 |
| Arkansas | $3{ }_{5}$ | ${ }^{671}$ | 433 | 1,109 |
| Oklahoma--..... | 5 | 171 | 147 | 318 |
| North Central Division: |  |  |  |  |
|  |  |  |  |  |  |
| Indiana. | 80 | 5,432 | 3,232 | 8,664 |
| Illinois. | 280 | 10,227 | 5,970 | 16,197 |
| Michisan- | 234 | 4,030 | - 3,343 | 7.373 |
| Wisconsin. | 150 | 2,958 | - 2,185 | 5,143 |
| Minnesota | 72 | 2,366 | 1,241 | 3,607 |
| Iowa .... | 303 | 6,238 | 4,699 | 10.937 |
| Missouri | 135 | 5.061 | 3,595 | 10,305 |
| North Dakota | 13 | 234 | 122 | -356 |
| South Dakota | 50 | 715 | 488 | 1,203 |
| Nebraska | 227 | 4,2\%6 | 3,594 | 7,870 |
| Kansas... | 193 | 2,999 | 2,690 | 5,689 |
|  |  |  |  |  |
| Wontana -..- | 16 | 472 68 | ${ }_{81} 51$ | 985 149 |
| Colorado | 30 | 667 | 646 | 1,313 |
| New Mexico | 7 | 56 | 80 | 136 |
| Arizona | 3 | 63 | 31 | 93 |
| Utah | 12 | 620 | 310 | 930 |
| Nevada. | 7 | 56 | 105 | 161 |
| Idaho | 6 | 65 | 53 | 118 |
| Washingtou | 36 | 1,159 | 861 | 2,020 |
| Oregon ${ }_{\text {California }}$ | 32 104 | 1876 3,248 | 624 2,512 | 5,760 |
| Callormia | 104 | 3,248 | 2,512 | 5,760 |

Table 2.-Students in commercial and business courses in universities and colleges and public and private normal schools in 1899-1900.


Table 3.-Students in commercial and business courses in private high schools and academies and in public high schools in 1899-1900.

| State or Territory. | Private high schools and academies. |  |  |  | Public high schools. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Num- } \\ & \text { ber of } \\ & \text { schools. } \end{aligned}$ | Students. |  |  | Num. ber of schools. | Students. |  |  |
|  |  | Male. | Female. | Total. |  | Male. | Fe- | Total. |
| United States. | 869 | 9,911 | 5, 738 | 15,649 | 2,893 | 33, 133 | 35, 75 \% | 68,890 |
| North Atlantic Division | 282 | 3,501 | 1,808 | 5,309 | 981 | 12,996 | 13,332 | 26,328 |
| South Atlantic Division. | 143 | 1,314 | 1,627 | 1,941 | 148 | 2,159 | 2,188 | 4,347 |
| South Central Division | 158 | 1,851 | 875 | 2,725 | 160 | 1,284 | 1,221 | 2,505 |
| North Central Division | 211 | 2, 592 | 1,618 | 4,140 | 1,472 | 15,016 | 17,100 | S2, 116 |
| Western Division....... |  | 723 |  | 1,533 | 13: | 1,678 | 1,916 | 3,594 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |
| Maine -............... | 20 | $17 \%$ 310 | 128 | 305 389 | 82 83 | 638 205 | 621 | 1,259 |
| Vermont .......... | 11 | 109 | \% 7 | 186 | 42 | 269 | 288 | 557 |
| Massachusetts | 25 | 111 | 141 | 252 | 162 | 2,488 | 3,120 | 5, 308 |
| Rhode Island | 6 | 202 | 24 | 226 | 18 | 267 | 330 | ${ }^{597}$ |
| Connecticut. | 24 | 178 | 146 | 323 | 45 | 594 | 737 | 1,331 |
| New York. | 92 | 999 | 447 | 1,446 | 279 | 4,375 | 3,301 | 7,676 |
| New Jersey, | 23 | 117 | 169 | 1286 | 80 | 1,234 | 1,250 | 2,484 |
| Pennsylvania -i....... South Atlantic Division: | 60 | 1,269 | 627 | 1,895 | 240 | 22, 926 | 3,471 | 6,397 |
| Delaware .-........... | 1 | 2 | 0 | 2 | 10 | 92 | 183 | 275 |
| Maryland. | 17 | 200 | 100 | 360 | 38 | 926 | 705 | 1,631 |
| District of Columbia | 11 | 72 | 96 | 168 | 2 | 322 | 436 | 758 |
| Virginia | 36 | 285 | 118 | 403 | 22 | 213 | 28. | 525 |
| West Virginia | 10 | 76 | 51 | 127 | 23 | 195 | 259 | 454 |
| North Carolina | 39 | 451 | 145 | 596 | 3 | 7 | 8 | 15 |
| South Carolina | 12 | 82 | 44 | 126 | 10 | 88 | 17 | 105 |
| Georgia - | 14 | 83 | 58 | 143 | 28 | 205 | 216 | 421 |
| Florida---7--...... | 3 | 1 | 15 | 16 | 12 | 81 | 82 | 163 |
| South Central Division: |  |  |  |  |  |  |  |  |
| Kentucky | 33 <br> 32 | 391 261 | ${ }_{112}^{15}$ | 503 414 | 15 46 | 87 276 | ${ }^{62}$ | 149 567 |
| Alabama | 17 | 177 | 228 | 405 | 15 | 148 | 156 | 304 |
| Mississippi | 11 | 235 | 20 | 255 | 9 | 84 | 144 | 228 |
| Louisiana | 13 | 221 | 39 | 260 | 8 | 171 | 64 | :35 |
| Texas | 32 | 430 | 238 | 668 | 52 | 334 | 408 | \%92 |
| Arkansas | 14 | 103 | 65 | 168 | 13 | 100 | 61 | 161 |
| Okiahoma | 1 | 0 | 9 | 9 | 2 | 34 | 35 | 69 |
| Indian Territory | 5 | 33 | 11 | 44 |  |  |  |  |
| North Central Division: |  |  |  |  |  |  |  |  |
| Ohio -..... | 15 | 106 | 112 | ${ }_{337}^{218}$ | 190 37 | 2,070 648 | 1,761 | 3,831 $1,2 \% 8$ |
| Inilinois | 35 | 504 | 304 | 8.8 | 197 | 1,939 | 2,190 | 4,129 |
| Michigan | 10 | 56 | 142 | 198 | 206 | 1,959 | 2,022 | 3.981 |
| Wisconsill | 17 | 245 | 100 | 345 | 113 | 1,047 | 1,271 | 2,318 |
| Minnesota | 21 | 405 | 141 | 546 | 32 | 360 | 340 | 760 |
| Iowa... | 21 | 301 | 17. | 473 | 236 | 2,214 | 2,558 | 4,76\% |
| Missouri. | 41 | 424 | 256 | 680 | 64 | 1,282 | 1,634 | 2,916 |
| North Dakota. |  |  |  |  | 8 |  | 74 | 1.4 |
| South Dakota | 5 | 195 | 93 | 113 | ${ }^{36}$ | . 271 | 306 | 577 |
| Nebraska | 16 | 125 | 98 | 223 | 196 | -, 830 | 2,495 | 4,325 |
| Kansas .-....... | 11 | \% | 71 | 149 | 157 | 1,346 | 1,819 | 3,165 |
| Wyoming | 3 |  | 10 |  | 3 | 37 | 56 | 93 |
| Colorado. | 3 | 33 | 36 | 69 | 23 | 254 | 301 | 555 |
| New Mexico | 1 | 0 | r | 7 | 4 | 14 | 38 | 53 |
| Arizona |  |  |  |  | ${ }_{2}^{2}$ | 12 | 20 | 32 |
| Utah | 7 | 232 | 42 | 274 | 3 | 72 | 95 | 167 |
| Nevada |  |  |  |  |  | 56 | 105 | 161 |
| Idaho. |  |  |  |  | 4 | 24 | 21 | 45 |
| Washington |  | 12 | 131 | 206 | 17 | $15 \%$ | 179 | 336 |
| Oregon- | 12 | 107 | 121 | 228 | 13 | 190 | 196 | 1 386 |
| California | 38 | $2: 6$ | $45 \%$ | 733 | 48 | 825 | 864 | 1,689 |

Table 4．－Instructors and students in commercial and business schools in the United States reporting in 1899－1900．

| State or Territory． |  | Instructors． |  |  | Students enrolled． |  |  | Students in day schools． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { ت゙ } \\ & \text { ※゙ } \\ & \text { E } \end{aligned}$ |  |  | E |  | 号 |  |
| ．United States ．．．．－．．． | 373 | 1，413 | 699 | 2，112 | 58，396 | 33,153 | 91， 549 | 4 4,456 | 2 $3,5 \ldots 0$ | \％0，9\％8 |
| North Atlantic Division．．． | 108 | $4 \% 9$ | 233 | 662 | 17， 261 | 11，290 | 28，531 | 11， 688 | 8，638 | 20，396 |
| South Atlantic Division ．－． | 24 | 90 | 53 | 143 | 4，198 | 2，410 | 6，638 | 3，164 | 1，83\％ | 4．999 |
| South Central Division．．．． | 38 | 152 | 53 | 205 | 6，631 | 2，59\％ | 9，237 | 5， 398 | 2，23\％ | 7.545 |
| North Central Division．．．． | $1 \% 1$ | 615 | 284 | 900 | 25， 714 | 13， 897 | 39，611 | 20，800 | 11， 715 | 32． 595 |
| Western Division．．．．．． | 32 | 126 | 76 | 202 | 4，592 | 2，930 | 7，522 | 3， 446 | 2，067 | 5,513 |
| North Atlantic Division： <br> Maine | 4 | 8 | 8 | 16 | 494 | 316 | 810 | 463 | 289 | 752 |
| New Hampshire ．－． | 1 | 4 | 0 | 4 | 41 | 16 | 57 | 41 | 16 | 57 |
| Vermont | 2 | 5 | 5 | 10 | 145 | 103 | 248 | 115 | ． 88 | 203 |
| Massachusetts | 15 | 53 | 41 | 94 | 1，532 | 1．614 | 3， 146 | 1，249 | 1，304 | 2，553 |
| Fhode Island． | 2 | 11 | 3 | 14 | 269 | 214 | ， 483 | 238 | － 198 | ， 436 |
| Connecticut | 10 | 21 | 23 | 47 | 876 | 787 | 1，694 | 730 | 639 | 1，359 |
| New York． | 33 | 146 | 43 | 259 | 6， 131 | 3，909 | 10，043 | 4，482 | 2，897 | \％＇879 |
| New Jersey | 8 | 40 | $1 \%$ | 57 | 1，979 | $92 \%$ | 2，89\％ | 1，030 | \％ 709 | 1，739 |
| Penusylvania | 33 | 138 | 43 | 181 | 5，799 | 3， 104 | 9， 003 | 3，310 | 2，498 | 5，838 |
| South Atlantic Division： <br> Delaware | 1 | 11 | 1 | 12 | $3 \% 0$ | 93 | 413 | $18 \%$ | 90 | $27 \%$ |
| Maryland | 1 | 6 | 0 | 6 | 200 | 159 | 359 | 135 | 125 | 26 |
| District of Columbia． | 4 | 10 | 22 | 32 | 921 | 996 | 1．920 | 503 | 591 | 1，094 |
| Virginia－．－．－．－－－－．－－ | 6 | 28 | 12 | 40 | 915 | 419 | 1， 364 | T79 | 381 | 1，163 |
| West Virginia | 2 | 8 | 4 | 12 | 393 | 218 | $5 \pm 1$ | $23 \%$ | $1 \% 8$ | 405 |
| North Carolina | 1 | 1 | 0 | 1 | 8 | 0 | 8 |  |  |  |
| South Carolina | 1 | 0 | 2 | 2 | 20 | 15 | 3\％ | 20 | 15 | 3.5 |
| Georgia－ | 6 | 21 | 9 | 30 | 1，1\％0 | 367 | 1，537 | 1，099 | 339 | 1，438 |
| Florida－－－－－－－－－－－－ | 2 | 5 | 3 | 8 | 318 | 113 | 461 | 219 | 113 | 332 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 5 | $\stackrel{19}{93}$ | 6 0 | 25 | 700 | 399 | 1，099 | $\begin{array}{r}603 \\ \hline 988\end{array}$ | $3 \% 9$ 580 | ．982 |
| Tennessee | 7 | 23 | 9 | 32 | 1． 529 | $63 \%$ | 2，179 | 1，238 | 580 | 1，818 |
| Alabama | 3 | 11 | 6 | $1 \%$ | 111 | 270 | 981 | 402 | 238 | 640 |
| Mississippí | 6 | 33 | 4 | 37 | \％36 | 65 | 801 | 728 | 60 | 786 |
| Louisisna | 4 | 13 | 5 | 18 | 605 | 166 | \％1 | 375 | 121 | 495 |
| Texas | 8 | 35 | 11 | 46 | 1， 792 | 645 | 2， 437 | 1，54\％ | 581 | 2，128 |
| Arkansas | 3 | 11 | 8 | 19 | 498 | 291 | 719 | 303 | 198 | 501 |
| Oklahoma | 2 | 7 | 4 | 11 | $13 \%$ | 103 | 210 | 114 | 80 | 194 |
| Indian Teruitory |  |  |  |  |  |  |  |  |  |  |
| North Central Division： Ohio | 25 | \％9 | 44 | 123 | 2，8\％1 |  | 4，630 |  | 1．44\％ |  |
| Indiana | 19 | 79 | 37 | 116 | 3，465 | 2，061 | 5，5：6 | 2，562 | 1，623 | 4，185 |
| Illizois | 29 | 140 | 49 | 189 | 6． 402 | 3，146 | 9，618 | 5， 4.7 | 2， 711 | 8，158 |
| Michigar | 15 | 43 | 38 | 81 | 1，860 | 1，030 | 2，890 | 1.475 | 839 | 2，314 |
| Wisconsin | 15 | 37 | 21 | 58 | 1，508 | \％84 | 2，292 | 1．21． | 661 | 1，373 |
| Minnesot | 13 | 35 | 17 | 52 | 1，485 | 743 | 2，178 | 1，068 | 593 | 1，661 |
| Iowa． | 21 | 65 | 35 | 100 | 2，793 | 1，5\％4 | 4.367 | 2，406 | 1， 475 | 3， 881 |
| Missouri | 14 | \％$\%$ | 18 | 90 | 2，854 | 1，592 | 4，446 | 2，208 | 1，273 | 3， 481 |
| North Dakota | 1 | 4 | 0 | 4 | 60 | 20 | 80 | 51 | 17 | 68 |
| South Dakota | 2 | $\tau$ | 3 | 10 | $15:$ | 68 | $2 \because 0$ | 145 | 62 | 207 |
| Nebraska | 8 | 28 | 13 | 41 | 1，642 | 760 | 2，402 | 1，616 | 737 | 2，383 |
| Kansas ．－ | 8 | 27 | 9 | 36 | 60：3 | 350 | 968 | 506 | 307 | 813 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |
| Montana－－． | 3 | 14 | 6 | 20 | 49 | 437 | 846 | 258 | 124 | $3 \times 2$ |
| Wyoming－． |  |  |  |  |  |  |  |  |  |  |
| Colorado | 3 | 7 | 4 | 11 | 363 | 300 | 603 | 93 | 85 | 178 |
| New Mexico |  |  |  |  |  |  |  |  |  |  |
| Arizona | 1 | 1 | 1 | ${ }_{12}^{2}$ | 50 | 11 143 | 61 489 | 40 $20 \%$ | 9 133 | 49 340 |
| Utah | 2 | 7 | 5 | 12 | 316 | 173 | 489 | 207 | 133 | $3 \pm 0$ |
| Idaho | 2 | 3 | 2 | 5 | $41^{-}$ | 32 | \％ | 37 | 29 | 66 |
| Washingto | 5 | 27 | 13 | 38 | 810 | 524 | 1， 354 | 492 | 362 | 854 |
| Oregon | 3 | 11 | 8 | 19 | 515 | 280 | ． 745 | 515 | 280 | 797 |
| California | 13 | 58 | 37 | 45 | 2，058 | 1，187 | 3， 831 | 1，804 | 1，045 | 2，849 |

Table 5．－Graduates in commercial and business schools and students in evening courses reporting in 1899－1900．

| State or Territory． | Students in evening schools not in any day schools． |  |  | Graduates in com－ mercial course． |  |  | Graduates in aman－ uensis course． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \dot{g} \\ \text { 甹 } \end{gathered}$ |  |  | $\begin{gathered} \text { ® } \\ \underset{\sim y y y y y}{\|c\|} \end{gathered}$ | 尔 | $\begin{aligned} & \text { تूं } \\ & \stackrel{1}{0} \end{aligned}$ | $\begin{aligned} & \text { 甹 } \\ & \text { 品 } \end{aligned}$ |  | ¢in ¢ |
| United States | 11，137 | 4，957 | 16，094 | 8，602 | 2，334 | 11，936 | 4，352 | 7，004 | 11，356 |
| North Atlantic Division．． | 4，232 | 2，311 | 6，543 | 2，411 | 1，019 | 3，430 | 1，649 | 3，082 | 4，731 |
| South Atlantic Division．． | 78.2 | 228 | 1，010 | 524 | 2：8 | 752 | 234 | 349 | 583 |
| South Central Division ．－ | 948 | 310 | 1，258 | 1，305 | 507 | 1，812 | 484 | 589 | 1，073 |
| North Centrai Division ．－ | 4，433 | 1，741 | 6，174 | 3，633 | 1，183 | 4，816 | 1，624 | 2，5：6 | 4，150 |
| Western Division． | 742 | 367 | 1，109 | 729 | 397 | 1，122 | 361 | 458 | 819 |
| North Atlantic Division： <br> Maine | 49 | 27 | ${ }^{7} 6$ | 76 | 24 | 100 | 21 | 53 | 73 |
| Vermont．－． | 30 | 15 | 45 | $\stackrel{16}{23}$ | $\stackrel{4}{8}$ | 30 | 7 | 22 | 29 |
| Massachusett | 284 | 309 | 593 | 191 | 145 | 336 | 113 | 188 | 301 |
| Rhode Island | 31 | 16 | 47 | 72 | 30 | 102 | 13 | 73 | 86 |
| Connecticut | 111 | 94 | 205 | 254 | 107 | 361 | 38 | 166 | 204 |
| New York． | 1，401 | 862 | 2，263 | 778 | 313 | 1，091 | 702 | 1，583 | 2，285 |
| New Jersey | 832 | 330 | 1，162 | 272 | 73 | 345 | 111 | 291 | 402 |
| Pennsylvania－－．．．．．．－ | 1，494 | 658 | 2，15； | 730 | 315 | 1，045 | 644 | 707 | 1，351 |
| South Atlantic Division： <br> Delaware | 141 | 20 | 161 | 43 | 6 | 49 | 21 | 30 | 51 |
| Maryland | 65 | 34 | 99 | 75 | 18 | 93 | 50 | 90 | 140 |
| District of Columbi | 137 | 75 | 212 | 84 | 75 | 159 | 52 | 79 | 131 |
| Virginia | 182 | 19 | 201 | 85 | 17 | 102 | 47 | 50 | 97 |
| West Virginia | 96 | 40 | 136 | 49 | 22 | 71 | 24 | 47 | 71 |
| North Carolina | 8 | 0 | 8 |  |  |  |  |  |  |
| South Carolina |  |  |  | 3 | 2 | 5 |  |  |  |
| Georgia | 58 | 13 | 71 | 128 | 82 | 210 | 31 | 31 | 62 |
| Florida．．． | 95 | 27 | 122 | 57 | 6 | 63 | 9 | 22 | 31 |
| South Central Division： |  |  |  |  |  |  |  |  |  |
| Kentucky－． | ${ }_{271}^{105}$ | 19 63 | 124 | 254 299 | 73 300 | 327 599 | 71 469 | 139 292 | $\stackrel{210}{561}$ |
| Alabama． | 37 | 6 | 43 | 86 | 11 | 97 | 26 | 33 | 59 |
| Mississippi | 9 | 9 | 18 | 56 | 12 | 68 | 2 | 3 | 5 |
| Louisiana | 230 | 45 | 275 | \％ | 14 | 86 | 11 | 26 | 37 |
| Texas ．－． | 223 | 70 | 293 | 494 | 84 | 578 | 91 | 75 | 166 |
| Arkansas | 50 | 79 | 129 | 44 | 13 | 57 | 14 | 21 | 35 |
| Oklahoma | 23 | 13 | 42 |  |  |  |  |  |  |
| Indian Territory－．．．． |  |  |  |  |  |  |  |  |  |
| North Central Division： Ohio． | 778 |  |  | 543 | 211 |  | 281 | 459 | 740 |
| Indiana | $66 \underset{\sim}{1}$ | 365 | 1，032 | 716 | 305 | 1，021 | 148 | 249 | 397 |
| Illinois | 984 | 358 | 1，342 | 4.98 | 89 | 587 | 306 | 352 | 658 |
| Michigan | 380 | 201 | 581 | 136 | 40 | 176 | 24 | 49 | 73 |
| Wisconsin | 314 | 77 | 391 | 285 | 42 | 327 | 107 | 131 | 238 |
| Minnesota | 255 | 84 | 339 | 260 | 98 | 358 | 145 | 233 | 378 |
| Towa． | － 342 | 117 | 459 | 207 | 76 | 1883 | 96 | 191 | 287 |
| Missouri | 606 | 169 | 775 | 790 | 269 | 1，059 | 427 | $72 \%$ | 1，154 |
| North Dakota | 9 | 3 | 12 | 4 | 2 |  | 1 | 2 | 3 |
| South Dakota | 7 | 6 | 13 | 4 | 4 | 8 |  |  |  |
| Nebraska | 26 | 13 | 39 | 121 | 22 | 143 | 51 | 86 | 137 |
| Kansas， | 65 | 23 | 88 | 69 | 25 | 94 | 38 | 47 | 85 |
| Western Division： |  |  |  |  |  |  |  |  |  |
| Montana． <br> Wyoming | 200 | 100 | 300 | 9 | 12 | 21 | 12 | 15 | 27 |
| Colorado | 57 | 29 | 86 | 12 | 4 | 16 | 1 | 7 | 8 |
| New Mexic |  |  |  |  |  |  |  |  |  |
| Arizona | 10 | ${ }^{2}$ | 119 |  |  |  |  |  |  |
| $\begin{aligned} & \text { Utah } \\ & \text { Nevada. } \end{aligned}$ | 85 | 64 | 149 | 32 | 8 | 40 | 21 | 32 | 53 |
| Idaho． |  |  |  |  | 2 | 8 | 1 | 5 |  |
| Washington | 168 | 57 |  | 61 | 45 | 106 | 24 | 73 | ${ }_{8} 97$ |
| Oregon． | 218 | $11 \%$ | 230 | 1116 503 | 285 | 788 | 285 | 65 261 | 546 |
|  |  |  |  |  |  |  |  |  |  |

Table 6.--Students in certain courses of study in commercial and business schoots reporting in 1899-1900.


Table 7.-Public high schools reporting regular business courses and those having students in bookkeeping in 1899-1900.

| State or Territory. | Business courses. |  |  |  | Bookkeeping. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools reporting. | $\begin{aligned} & \text { Male } \\ & \text { stu- } \\ & \text { dents. } \end{aligned}$ | $\begin{aligned} & \text { Female } \\ & \text { stu- } \\ & \text { dents. } \end{aligned}$ |  | Schools report ing. | Male students. | $\begin{aligned} & \text { Female } \\ & \text { stul- } \\ & \text { dents. } \end{aligned}$ |  |
| United States | 505 | 11,196 | 10,057 | 21,253 | 2,913 | 33,133 | 35, 757 | 68,890 |
| North Atlantic Division | 174 | 5,464 | 4,596 | 10,060 | 981 | 12, 096 | 13,332 | 26,328 |
| South Atlantic Division. | 52 | 904 | 978 | 1,88\% | 148 | 2,159 | 2,188 | 4,347 |
| South Central Division.- | 71 | 5.9 | 6558 | 1,187 | 160 | 1,284 | 1,221 | 2,50.5 |
| North Central Division | 163 | 3,322 | 2,738 | 6,058 | 1,492 | 15,016 | 17,100 | 32. 116 |
| Western Division...... | 43 | 937 | 1,089 | 2,066 | $13 \%$ | 1,678 | 1,916 | 3,594 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |
| Maine --............-- | 14 | 131 | 128 | 259 | 83 | 638 | 621 | 1,259 |
| New Hampshire | 1 | 1 | ${ }^{9}$ | 10 | 33 | 205 | 214 | 419 |
| Massachusetts | 36 | 1,143 | 1.616 | 2,759 | 162 | 2,488 | 3,120 | 5,608 |
| Rhode Island | 7 | 136 | . 268 | -424 | 18 | 267 | ${ }^{3} 30$ | 597 |
| Connecticut. | 10 | 181 | 230 | 411 | 45 | 594 | 737 | 1,331 |
| New York. | 31 | 2,251 | 813 | 3,064 | 279 | 4,375 | 3,301 | 7,676 |
| New Jersey | 23 | 627 | 42.0 | 1,047 | 80 | 1,234 | 1,250 | 2,481 |
| Pennsylvania | 46 | 938 | 1,096 | 2,051 | 210 | 2,926 | 3,471 | 6,397 |
| South Atlantic Division: Deluware |  |  |  |  | 10 | 92 | 183 | $2 \% 5$ |
| Maryland |  | 84 | 11 | 155 | 38 | 926 |  | 1,631 |
| District of Columbia | 2 | 320 | 486 | 758 | 2 | 322 | 436 | 758 |
| Virginia -- | 13 | 200 | 217 | 417 | 22 | 243 | 28.2 | $5 \% 5$ |
| West Virginia |  | 24 | 32 | 56 | 23 | 195 | 259 | 454 |
| North Carolina | $\stackrel{2}{5}$ | 4 | 2 | 6 | 3 | \% | 8 | 15 |
| South Carolina | 5 | 68 | 10 | 78 | 10 | 88 | 17 | 10. |
| Georgia | 19 | 102 | 175 | 337 | 28 | 205 | 215 | 421 |
| Florida -- | 5 | 40 | 35 | 75 | 12 | 81 | 82 | 163 |
| South Central Division: |  |  |  |  |  |  |  |  |
| Tennessee | 17 | 114 | 63 | 177 | 46 | 276 | 291 | 567 |
| Alabama | 9 | 21 | 356 | 427 | 15 | 148 | 156 | 304 |
| Mississippi | 8 | 53 | 10 | 62 | 9 | 84 | 144 | 228 |
| Louisiana | 4 | 37 | 47 | 84 | 8 | 171 | 64 | 23.5 |
| Texas.-. | 21 | 194 | 163 | $35 \%$ | $5 \%$ | 384 | 408 | 79\% |
| Arkansas | 5 | 33 | 9 | 4. | 13 | 100 | 61 | 161 |
| Oklahoma --.... |  |  |  |  | 2 | 34 | 35 | 69 |
| Tndian Territory |  |  |  |  |  |  |  |  |
| North Central Division: <br> Ohio $\qquad$ | 30 | 1,005 | 636 | 1,641 | 190 | 2, 070 | 1,761 |  |
| Indiana. | 5 | 58 | 47 | 105 | 57 | 648 | ${ }^{1} 630$ | 1,278 |
| Illinois | 21 | 358 | 344 | 702 | 197 | 1,939 | 2,190 | 4,129 |
| Michigan | 26 | 623 | 504 | 1,12\% | 206 | 1,959 | 2,022 | 3,981 |
| Wisconsin | 9 | 217 | 220 | 437 | 113 | 1,047 | 1,271 | 2,318 |
| Minnesota | 4 | 45 | 30 | 75 | 32 | 360 | 340 | 700 |
| Iowa---- | 27 | 328 | 281 | 612 | 236 | 2,214 | 2,558 | 4, 772 |
| Missouri | 19 | 379 | 407 | 785 | 64 | 1,282 | 1,634 | 2,916 |
| North Dakota |  |  |  |  | 8 | 50 | 74 | 124 |
| South Dakota | 1 | 3 | 4 | 7 | 36 | 271 | 304 | 57 |
| Nebraska | 10 | 172 | 143 | 315 | 196 | 1,830 | 2,495 | 4,325 |
| Kansas-....... | 13 | 134 | $11 \%$ | 251 | 157 | 1,346 | 1,819 | 3,165 |
| Western Division: Montana |  |  |  |  |  |  |  |  |
| Wyoming | 1 | 1 | 0 | 1 | 3 | ${ }_{37}$ | 56 | 93 |
| Colorado | , | 22 | 22 | 44 | 23 | 254 | 301 | 555 |
| New Mexico. | , | 18 | 23 | 41 | 4 | 14 | 38 | 52 |
| Arizona | ${ }_{6}$ | 12 | 29 | 33 | $\stackrel{2}{3}$ | 12 | 20 | -32 |
| Utah | $\stackrel{2}{1}$ | 94 | 97 | 191 | 3 | 76 | 95 | 167 |
| Nevada. | 1 | 19 | 35 | 54 | 7 | 56 | 105 | 161 |
| Washing |  | 18 | 5 | 3 | ${ }_{17}^{4}$ | 157 | 179 | 330 |
| Oregon | $\stackrel{3}{2}$ | \%3 | 65 | 138 | 13 | 190 | 196 | 386 |
| California | 28 | 720 | 822 | 1,54, | 48 | 8.5 | 864 | 1,659 |

Table 8.-Public high schools reporting siudents in commercial geography and commercial law in 1899-1900.


Table 9.-Statistics of commercial and business

schools in the United States in 1899-1900.


Table 9.-Statistics of commercial and business schools

in the United States in 1899-1900-Continued.


Table 9.--Statistics of commercial and business schools


* Statistics of 1893-99.
in the United States in 1899-1900--Continued.


Table 9.-Statistics of commercial and business schoots


[^141]in the United States in 1899-1900-Continued.


Table 9.-Statistics of commercial and business schools

in the United Staies in 1899-1900--Continued.


Table 9.-Statistics of commercial and business schools


* Statistics of 1898-99.
in the United States in 1899-1900-Continued.


Table 9．－Statistics of conmercial and business schools

|  | Postiolifice． | Name． | Executive officer． | $\begin{aligned} & \text { In- } \\ & \text { struct- } \\ & \text { ors. } \end{aligned}$ |  | Actual num－ ber of stu－ dents en－ rolled． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | $\stackrel{\dot{む}}{\stackrel{\leftrightarrow}{c}}$ | （0） |  | － | 完 |
|  | 甞 | ${ }^{2}$ | 8 | 4 | J | 6 | 8 | 8 |
|  | NEW YORK－ continued． |  |  |  |  |  |  |  |
| 243 | Kingston | Spencer＇s Basiness School．．．． | B．H．Spencer | 5 | 2 | 152 | $1 \% 8$ | 330 |
| 241 | Lockport | Lockport Business Institute．－ | J．Franklin Ryan－－－ | 3 | 0 | 75 | 33 | 108 |
| 245 | Newlurgh | Spencerian Institute of Búsi－ ness． | E．M．Turner－．－．．．－． | 3 | 2 | 9：2 | 110 | 202 |
| 250 | New York | Metropolitan Shorthand School． | W．L．Mason ．．．．．．－－－ | 1 | 4 | 25 | 125 | 150 |
| 251 | do | A．O．Hail Business College ．．－ | Aldis Owen Hall ．．． | 5 | 5 | 300 | 25 | 325 |
| 25： | do | New York Commercial and Stenographic School． | Philip B．Gibson ．．．－ | 7 | 0 | 93 | 215 | 308 |
| 25.3 | do | Packard Commercial College． | L．H．Packard | 10 | 5 | 539 | 240 | $7 \%$ |
| 251 | do | The Paine Uptown Business College． | H．W．Remington．．－ | 3 | 6 | 314 | 152 | 466 |
| 255 | －do | Wood＇s New York School ．．．． | Frederick E．Wood－ | 13 |  | 49.2 | $5: 3$ | 1012 |
| 256 | $\mathrm{do}$ | Walwor th Businessand Sten－ ographic Institute． | G．S．Walworth．．． | 3 | 4 | 149 | 110 | 259 |
| $25 \%$ | Niagara Falls ．－ | Niagai＇a Business College＊．．－－ | F．C．Hovey | 1 | $\stackrel{2}{2}$ | 37 | 38 | 75 |
| 258 | Oswego ．－．．－． | Chaftee＇s Phonographic Insti－ tute． | E．M．Woli | 2 | 3 | 35 | 25 | 60 |
| 239 | Rochester | Rochester Business Institute＊ | A．S．Osborn | 8 | 4 | 578 | 100 | 678 |
| 260 | －－－－do ．－－－ | The Under－hill Business Col－ lege． | B．S．Underhill | 2 | 3 | 67 | 77 | 144 |
| 261 | Schenectady | Business School and Short－ hand Institute．＊ | Wm．F．Fitzgerald－－ | ～ | 3 | 79 | 46 | 125 |
| 263 | Troy | Troy Business College ．．．．．．．． | Thos．H．Shields | 6 | \％ | 381 | 164 | 545 |
| 203 | Utica | Utica Business College＊ | G．F．Hendrick． | 5 | 3 | 161 | 72 | 233 |
|  | NORTH CAROLINA． |  |  |  |  |  |  |  |
| 265 | Washington | Washington Business School | G．A．Heptinstall | 1 | 0 | 8 | 0 | 8 |
|  | NORTH DAKOTA． |  |  |  |  |  |  |  |
| 263 | Grand Forks ． OKLAHOMA． | Northwestern Normal Col－ lege and Commercial Insti－ tute． | J．J．Swengel | 4 | 0 | 60 | 20 | 80 |
| $26 \%$ | Guthrie．． | Capital City Business College． | R．A．Gaffiney | 5 | 3 | 87 | 73 | 160 |
| 268 | Oklahoma | Oklahoma Business College．．－ | A．L．Van Buskirk－－ | 2 | 1 | 50 | 30 | 80 |
| 269 | Atron． | Hammel＇s Business College ．－． | P．Hammel | 3 | 1 | 120 | 48 | 168 |
| 270 | Canton．．．． | Actual Business College－－．．．－ | W．W．Patterson．．．． | 3 | 3 | 105 | 95 200 | 200 |
| 271 | Cincinnati | The Bartlett Commercial Col－ lege． | C．M．Bartlett－－－－－． | 4 | 4 | 200 | 200 | 400 |
| $2 \%$ | －．do | St．Joseph＇s College ．－．．．．．．．．．．－ | Rev．Jos．M．Scherer－ | 7 | 0 | 72 | 0 | 72 |
| $2 \% 3$ | Clevelan | Spencerian Business College．－ | H．T．Loomis ．－．．．．． | 11 | 4 | 400 | 275 | 6.5 |
| 274 | －．－do | The Central Institute－．．．－．．．－ | James G．Hobbie | 5 | 2 | 176 | 108 | 281 |
| 275 | Columbus．－．－．．．－ | Par＇son＇s Business College ．．．－ | M．B．Cooper－－－ | 3 | 0 | 65 | 29 | 91 |
| 276 | East Liverpool．． | Ohio Valley Business College | $\begin{aligned} & \mathrm{J} \text { H. and } \mathrm{F} \text {. } \mathrm{T} \text {. } \\ & \text { Weaver. } \end{aligned}$ | 4 | 3 | 158 | 66 | $2 \because 4$ |
| $2 \% 7$ | Lancaster | Columbia Commercial Uni－ versity． | T．E．Warren ．．．．．．． | 2 | 2 | 41 | 31 | 72 |
| $2 \sim 3$ | Lima | Lima Business College．．．．．．．． | Howard W．Pears ．－ | 2 | 1 | 90 | 58 | 148 |
| $2 \% 9$ | Mansfield | Ohio Business College－．．－．－．－－ | J．W．Sharp－－－－．－－－ | 1 | 2 | 65 | 40 | 105 |
| 280 | Massillon | Massillon Actual Business College． | F．G．Yocum ．－．－－－－ | 2 | 2 | 41 | 43 | 84 |
| 281 | Newark．．．．．．．．－－ | Newark Business College．．．．－ | S．L．Beeney－－．．．．．－ | 1 | 0 | 130 | 20 | 150 |
| 28： | New Philadel－ phia． | New Philadelphia Business College． | W．C．Snott－－－－－－－－ | 2 | 1 |  | 21 | 49 |
| 283 | Oberlin ．－．．．．．．－． | Oberlin Business College ．．．．－ | J．＇I＇．Henderson．．．．． | 4 | 2 | 18\％ | 54 | 236 |
| 284 | Piqua ．．．．．．． | Piqua Commercial College．．．－ | C．E．Beck ．－．．．．．．．．． | $\stackrel{2}{2}$ | 1 | 40 | 25 | 65 |
| 285 | Poitsmouth | Graham＇s Business College－－－ | W．R．Graham－－．．－． | 2 | 2 | 64 | 30 | 94 |
| 286 | Springfield | Nelson＇s Business College ．．．－ | R．J．Nelson ．－．．－．．－． | 2 | 1 | 126 | 6 | 132 |
| $28 \%$ | ．．－－do ．．．．．．－－－－－－ | Williss College－－－－－．．．．．．． | F．W．Williss | 1 | 1 | 20 | 30 | 50 |

[^142]in the United States in 1899－1900－Continued．

| Actual number of students enrolled． |  |  |  | Average daily at－ tendance． |  | In com－ mercial course． |  | $\begin{gathered} \text { In } \\ \text { amanu- } \\ \text { ensis } \\ \text { course. } \end{gathered}$ |  | In course． |  | $\begin{aligned} & \text { In } \\ & \text { teleg- } \\ & \text { raphy. } \end{aligned}$ |  | $\begin{gathered} \text { Months } \\ \text { necessary } \\ \text { for' gradua- } \\ \text { tion. } \end{gathered}$ |  | Gradu－ ates in com－ mercial course． |  | Gradu－ ates in amanu ensis course． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Day school． |  | Evening school． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\stackrel{\text { g }}{\substack{\text { g }}}$ |  | $\frac{\stackrel{y}{3}}{\substack{\text { B }}}$ |  |  |  |  |  |  | $\begin{aligned} & \text { © } \\ & \text { é } \\ & \text { g } \\ & \text { © } \\ & \text { En } \end{aligned}$ |  |  | $\frac{\dot{0}}{\underset{\sim}{3}}$ |  |  |  |  | $\begin{aligned} & \text { 80 } \\ & \text { \# } \\ & \text { \# } \\ & 80 \\ & \text { 空 } \end{aligned}$ | $\frac{\dot{\Xi}}{\underset{\sim}{\leftrightarrows}}$ | $\begin{aligned} & \text { © } \\ & \text { ご } \\ & \text { घ̈ } \\ & \text { © } \end{aligned}$ | $\stackrel{\text { ® }}{\stackrel{\text { H }}{H}}$ |  |  |
| 9 | 13 | 是星 | 且砛 | 且：3 | 14 | 13 | 16 | 18 | 18 | 13 | を（ | ＇1通 | 29 | 3：3 | 㕠县 | 95 | ＇26 | 88 | 哭运 |  |
| 148 | 166 | 8 | 12 | 125 | 18 | 89 | 43 | 63 | 135 |  |  |  |  |  |  | 43 | 13 | 38 | 91 | 243 |
| 12 | 22 | 30 | 11 | 28 | 20 | 27 | 14 | 20 | 30 | 12 | 3 |  |  |  | 8 | 15 | 12 | 12 | 23 | 214 |
| 6 2 | \％8 | 32 | 30 | 85 | 40 | 51 | 40 | 30 | $\%$ | 11 | 0 |  |  |  | 12 | 8 | 2 | 8 | 19 | 245 |
| 10 | 75 | 15 | 50 | 50 | 50 |  |  | 25 | 125 |  |  |  |  |  | 6－8 |  |  | 20 | 115 | 250 |
| 200 | 0 | 50 | 25 | 75 | 20 |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  | 271 |
| 93 | 215 |  |  | 102 |  |  |  | 93 | 215 |  |  |  |  |  |  |  |  | 61 | 171 | 25： |
| 530 | 240 | 0 | 0 | 340 | 0 | 480 | 40 | 59 | 200 |  |  |  |  | 10－12 |  | 59 | 3 | 16 | 63 | 253 |
| $2 \%$ | 113 | 92 | 39 | 52 | 27 | 164 | 31 | 37 | 98 | 46 | 29 | 45 | 15 |  | 12 | 16 | 9 | 9 | 20 | 254 |
| 24 | 390 | 248 | 130 | 500 | 250 | 300 | $1: 0$ | 300 | 400 | 75 | 20 |  |  | 10 |  | 120 | 75 | 290 | 3.0 | 23．） |
| 89 | 60 | 60 | 50 |  |  | 60 | 60 | 60 | 75 |  |  |  |  |  |  |  |  |  |  | 206 |
| 37 | 38 |  |  | 54 |  | 30 | 27 | 45 | 23 |  |  |  |  | 6－12 | 12 | 10 | 14 | 2 | 20 | 257 258 |
| 578 | 100 |  |  |  |  |  |  | 40 | 80 |  |  |  |  |  |  |  |  |  |  | 259 |
| 67 | $7 \%$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 250 |
| 27 | 36 | 52 | 10 |  |  | 19 | 7 | 29 | 39 | 16 |  |  |  |  |  | $1 \%$ |  | 20 | 30 | 261 |
| 321 | 115 | 60 | 49 | 250 | 70 | 209 | 54 | 60 | 70 | 151 | 3. | 12 |  | 1 | 24 | 45 | 32 | 24 | 65 | 202 |
| 94 | 57 | 67 | 15 | 90 | 50 | 75 | 26 | 5 | 37 | 56 | 1 |  |  |  |  | 12 |  |  |  | $\checkmark 6$ |
|  |  | 8 |  |  |  | 8 | 0 |  |  |  |  |  |  |  |  |  |  |  |  | 265 |
| 51 | 17 | 9 | 3 | 80 | 12 | 60 | 12 | 6 | 12 |  |  |  |  |  |  | 4 |  | 1 | 2 | 266 |
| $\begin{aligned} & 74 \\ & 40 \end{aligned}$ | $\begin{aligned} & 60 \\ & 20 \end{aligned}$ | $\begin{aligned} & 13 \\ & 10 \end{aligned}$ | $\begin{array}{r} 9 \\ 10 \end{array}$ | 90 | 17 | 58 43 | 21 30 | 29 | 52 |  |  |  |  | 6 | $9-12$ |  |  |  |  | $\begin{aligned} & 2 \dot{2} 7 \\ & 268 \end{aligned}$ |
| 79 | 43 | 41 | 5 |  |  | 57 | 9 | 42 | 37 | 21 |  |  |  |  | 12－13 |  |  |  |  | 259 |
| 60 | 70 | 45 | 25 | 90 | 50 | 90 | 25 | 20 | 75 | 1. |  |  |  |  | 10 | 24 | 10 | 10 | 20 | 270 |
| 150 | 150 | 50 | 50 | 250 | 60 | 200 | 200 | 150 | 150 |  |  |  |  |  | 2 |  |  |  |  | $2 \% 1$ |
| 60 | 0 |  |  | 60 |  | 36 | 0 | 13 |  | ） 60 |  |  |  |  |  | 10 |  |  |  | $27 \%$ |
| 300 | 200 | 125 | 50 | 300 | 125 | 300 | 100 | 100 | 150 | 2 |  |  |  |  |  | 50 | 10 | －25 | 50 | $2 \% 3$ |
| 86 | 89 | 90 | 19 | 100 | 55 | 76 | 30 | 50 | 64 | ＋50 | 1 |  |  |  |  | 35 | 15 | 30 | 44 | 274 |
| 44 | 25 | 12 | 5 |  |  | 42 | 5 | 23 | 24 |  |  |  |  |  | 1 |  |  |  |  | 275 |
| 75 | 60 | 120 | 40 | 65 | 95 | 80 | 10 | 20 | 40 | 6 |  |  |  |  | $1:$ | 8 | 2 | － 2 | 8 | 276 |
| 41 | 25 | 35 | 39 | 41 | 31 | $7 \sim$ |  |  |  |  |  |  |  |  | 18 | 18 | 10 | 10 | 15 | $27 \%$ |
| 82 | 53 | 8 | 5 | 64 | 10 | 75 | 43 | 61 | 50 |  |  |  |  |  | 18 | 53 | 36 | － 46 | 38 | $2 \% 8$ |
| 60 | 30 |  |  | 50 |  | 35 | 20 | 10 | 40 |  |  |  |  |  |  | 25 | 10 | 10 | 20 | 279 |
| 26 | 32 | 18 | 8 | 48 | 20 | 30 | 12 | 11 | 31 | ．．． |  |  |  | 5 | 12－20 | 23 | 9 | 6 | 25 | 280 |
| 97 | 15 | 33 | 5 | 63 | 32 | 125 | 17 | 25 | 10 |  |  |  |  |  |  | 664 | 1. |  |  | 281 |
| 25 | 21 | 0 | 0 | 35 | 0 | －1\％ | 11 | 8 | 82 |  |  |  |  |  |  | － 9 | 1 | 1 | \％ | 282 |
| $1 \% 0$ | 52 | 12 | 2 | 125 | 25 | 140 | 15 | 40 | 40 | 2 |  | 6 |  |  |  | 50 | 10 | 35 | 38 | 283 |
| 35 | 22 | 5 | 3 |  |  | 35 | 6 | 12 | 2 | －－－ |  |  |  |  | 1 | 14 | 2 | 26 | 10 | 281 |
| 20 | 26 | 40 | 8 | 42 | $3 \overline{7}$ | 18 | 10 | － | － 15 | ${ }^{-\cdots}$ |  |  |  |  | 2 | 15 | 9 | 92 | 1： | 285 |
| 110 | 5 | 16 | 1 |  |  | $1 \%$ | 6 | －－－ |  |  |  |  |  |  | 1\％－18 | 8 ． | ．．．． |  |  | 286 |
| 20 | 30 |  |  | 47 |  |  |  | 20 | － 30 |  |  |  |  |  |  |  |  | 20 | 30 | 287 |

Table 9.-Statistics of commercial and business schools

$a$ The report of Pierce School sworn to by business manager.
in the United States in 1899-1900-Continued.


Table 9.-Statistics of commercial and business schools

in the United States in 1839-1900-Continued.


Table 9.-Statistics of commerciul and business schools


[^143]in the United States in 1899-1900-Continued.


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# CHAPTER XLIT. 

EDUCATION OF TIE COLORED RACE.


#### Abstract

References to preceding Reports of the United States Bureau of Education in which this subject has been treated: In Annual Reports-1870, pp. 61, 33i-339; 18\%1, pp. 6, 7, 61- $70 ; 1872$, pp. xvii, xviii; 1873, p. 1xvi; 1875, p. xxiii; 1876, p. xvi; 187\%, pp. xxxiii-xxxviii; 18\%8, pp. xxviii-xxxiv; 1879 , pp. xxxix-xlv; 1880, p. 1viii; 1881, p. 1xxxii; 1882-83, pp. xlviii-1vi, 85; 1883-84, p. liv; 1884-85, p. 1xvii; 1885-86, pp. 596, 650-656; 1886-87, pp. $990,871-881$; 188\%-88, pp. 20, 21, 167, 109, 988998; 1888-89, рр. 768, 1412-1439; 1889-90, pp. 620, 621, 624, 631, 1073-1103, 1388-1392, 139う-1485; 1890-91, pp. 620, 624, 792, 808, 915, 961-980, 1469; 1891-92, pp. 8, 686, 688, 713, 851-867, 1002, 123i-1237; 1892-93, pp. 15, 442, 1551-1572, 1976; 1893-94, pp. 1019-1051; 1894-95, pp. 1331-1424; 1895-96, pp. 2051,2115; 1893-97, pp. 2295-2353; 1897-98, pp. 2479-2507; 1898-59, pp. 2201-2225; Introduction to Annual Report for 1898-99, pp. lxxxviii-xcii; also in Circulars of Information-No. 3, 1883, p. 63; No. 2, 1889, pp. 123-133; No. 3, 1888, p. 122; No. 5, 1888, pp. 53, 54, 59, 60, 80-86; No. 1, j892, p. 71. Special Report on District of Columbia for 1869, pp. 193, 300,351-400. Special report, New Orleans Exposition, 1881-85, pp. 468-470, 775-781.


The estimated number of children in the South (the 16 former slave States and the District of Columbia) between 5 and 18 years of age for the scholastic year 1899-1900 was $9,094,490$. Of this number $6,103,390$, or 67.15 per cent, were whito and $2,991,100$, or 32.85 per cent, were colored, as shown in the first part of Table 1. The same table shows that the enrollment in the white public schools was 4,167,489, or 68.28 per cent of the white school population, while the enrollment in the colored public schools was $1,539,507$, or 51.46 per cent of the colored school population. The average daily attendance in the white schools was $2,711,701$, or 65.06 per cent of the white enrollment, and the average daily attendance in the negro schools was $95 \%, 160$, or 69.17 per cent of the colored enrollment.
It is shown in Table 2 that the total expenditure for the public schools of the South for the year 1899-1900 was $\$ 35,594,0 \% 1$. It is estimated that about 20 per cent of this sum, or $\$ 7,118,814$, was expended in support of the negro public schools.
The table shows the expenditure for both races for each year since 1870-r1, the aggregate for the 80 years being $\$ 615,103,943$. During the first part of the period the colored schools did not receive as large a share as 20 per cent of the whole, but it is estimated that the South has expended for the education of the colored race in the problic schools about $\$ 109,000,000$. It is impossible to obtain an accurate statement as to the amounts separately expended for the education of the negroes, for the reason that in twelve of the Southern States separate accounts are not kept. In Maryland the expenditure for negro schools is known for each of the 30 years. In North Carolina separate accounts have been kept since 1873, in the District of Columbia since 1875, in Kentucky since 1880, and in Florida since 1893. These statistics were given in the Report of the Commissioner of Education for 1898-99, pages laxuviii-xcii.

## PUBLIC HIGH SCHOOLS.

Tables 3 to 6 summarize the statistics of 92 public high schools for the negroes, 86 of these schools being in the South and included in the statistics of public com-
mon schools given in Table 1. For the 92 schools there were 272 teachers in 18991900 and a total enrollment of 8,448 . There were 3,216 pupils in elementary grades and 5,232 in secondary or high-school grades proper, as shown in Table 3. There were 1,083 students in the classical course, 1,303 in scientific courses, 2,788 in the English course, 100 in the business course, and 206 in the normal course. There were 600 pupils in manual training. The number of graduates from the highschool course was 646.
Table 6 gives a very incomplete financial summary of the colored high schools. Of the 92 schools, 59 had libraries aggregating 14,961 volumes, valued at $\$ 13,041$. The value of the property of 62 schools was $\$ 661,875$. The total income of 24 schools was $\$ 30,555$. In most cases separate accounts for pablic high schools are not kept.

## SCHOOLS SUPPORTED FROM PRIVATE SOURCES,

There were, for the year 1899-1900, reporting to this Office, 145 schools of secondary and higher grade for the education of colored students and supported almost entirely by funds from private sources. The statistics of these schools will be found summarized in Tables 7 to 12 .
The 145 schools had 37,696 students- 22,043 in elementary grades, 13,267 in secondary grades, and 2,385 in collegiate grades. Of the students in secondary grades there were 4,881 in training courses for teachers, and of these 803 were graduated. In higher education there were 1,751 students in professional courses, as shown in Table 10. There were 15,683 pupils of all grades in industrial training.
The aggregate income of 123 of the 145 schools was $\$ 1,182,365$, as shown in Table 12. Of this aggregate $\$ 212,950$ was received by 39 schools from public funds, 99 schools received $\$ 148,506$ from trition fees, 39 received $\$ 142,932$ from productive funds, and 102 schools received $\$ 077,97 \%$ from other sources. The greater part of this leiter sum must have been contributed by private individuals for the support of the schools during the year. It is shown in the first part of the table that 56 schools received in benefactions for the year $\$ 661,480$. Only $11 \%$ of the schools reported libraries, aggregating 247,780 volumes.
The statistics of the 92 public high schools are given in detail in Table 18. The detailed statisties of the 145 private schools are given in Tables 14 and 15.

Table 1.-Common-schoo? statistics, clcissified by race, 1893-1900.

| State. | Average daily attendance. |  | Per cent of enrollment. |  | Number of teachers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White. | Colored. | White. | Colored. | White. | Colored. |
| Alabama | 198.463 | 93,342 | 81.81 | 69. 75 | 5,000 | 1,578 |
| Arkansas | 142, 745 | 52, 656 | 61.97 | 63.45 | 5,518 | 1,441 |
| Delaware (1891-82) | a19,746 | a2, 34 | 69.73 | 60.66 | 734 | 106 |
| District of Columbia | 23, 852 | 11,611 | 76. 29 | 75.09 | 814 | 412 |
| Florida | 45,267 | 28,730 | 68.97 | 68.75 | 2,084 | 645 |
| Georgia | 178,961 | 119,276 | 62.26 | 61.08 | 6,55\% | 3,563 |
| Kentucky (1896-97) | $\alpha 2655,623$ | a 43, 074 | 61.41 | 62.14 | 8,564 | 1,396 |
| Louisiana | 90, 187 | 56,135 | 73.96 | 75.62 | 3,072 | 1,085 |
| Maryland (1898-99) | 109,696 | 22,989 | 60.11 | 49.07 | 4,300 | 827 |
| Mississippi (1898-99) | 98.695 | 102, 898 | 59.45 | 53.45 | 4,871 | 3,285 |
| Missouri | a 437,011 | a 23, 001 | 63.77 | 66.59 | 15. 397 | 804 |
| North Carolina | 142,413 | 64,505 | 52.65 | 49.61 | 5, 600 | 2,387 |
| South Carolina | 90, 348 | 110,947 | 71.54 | 71.30 | 3,270 | 2,294 |
| Tennessee. | 270,662 | 67.904 | 70.33 | 67.42 | a7,329 | a 1,866 |
| Texas. | a 309.876 | a83,904 | 68.58 | 66.28 | 12,019 | 3,001 |
| Virginia | 141,382 | 61,754 | 58.50 | 52. 72 | 6,671 | 2,165 |
| West Virginia | 145, 774 | ธ, 480 | 65.01 | 67.57 | 6,852 | $3 ; 7$ |
| Tóal 1899-1900. | 2,711, 601 | 957. 160 | 65. 05 | 62.17 | 98,052 | 27,182 |
| Total 1889-1890 | 2,165, 249 | 813, 710 | 63.64 | 62.74 | 78,903 | 24,072 |

a A pproximately.

TABLE 1.-Common-school statisties, classified by race, 1899-1900-Continued.

| State. | Estimated number of persons 5 to 18 years of age. |  | Percentage of the whole. |  | Pupils enrolled in the public schocls. |  | Per cent of persons 5 to 18 years enrolled. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White. | Colored. | White. | Colored. | White. | Colored. | White. | Colored. |
| Alabama | 351,630 | 301, 300 | 53.85 | 46.15 | 234,000 | 142,423 | 66.51 | 47.26 |
| Arkansas | 337,280 | 130, 749 | 72.06 | 27.94 | 230,345 | 34, 317 | 68.29 | 6!. 49 |
| Delaware (1891-92) | 39, 4770 | 8,900 | 81.61 | 18.39 | 28,316 | 4,858 | 71.74 | 54.58 |
| District of Columb | 45, 640 | 25,110 | 64.36 | 35.64 | 31,261 | 15,258 | 68.49 | 60. 76 |
| Florida | 97,970 | 77,640 | 55.59 | 44.21 | 67,077 | 41,797 | 68.48 | 53.83 |
| Georgia | 405, 950 | 280, 970 | 51.59 | 48.41 | 287, 397 | 195, 276 | 70.79 | 51.25 |
| Kentucky (1896-97) | 575, 040 | 98,490 | 85.37 | 14.63 | 432,572 | 69,321 | 75.8 | 70.38 |
| Louisiana | 223,760 | 242,590 | 48.43 | 51.57 | 121,936 | 74,233 | 53.53 | 30.60 |
| Maryland (1898-39) | 288, 089 | 77,290 | 77.63 | 22.37 | 182, 480 | $46,85.2$ | 68.07 | 60.61 |
| Mississippi (1888-99) | 227,470 | 831,330 | 40.71 | 59.29 | 167, 684 | 192,493 | 73.71 | 58.09 |
| Missouri | 910,980 | 55, 420 | 94.26 | 5.74 | 685, 276 | 34,510 | 75.22 | 62.32 |
| North Carolina | 418,560 | 250,970 | 63.52 | 37.48 | 270,447 | 130, 005 | 64.86 | 51.80 |
| South Corolina | 185, 860 | 311, 900 | 37.34 | 62.66 | 128, 289 | 155, 002. | 67.94 | 49.88 |
| Temnessee | 517, 060 | 174,519 | 74.76 | 25.24 | 384, 649 | 100, 705 | 74.39 | 57. 70 |
| Texas. | 819,140 | 250,860 | 76.55 | 23.45 | 451, 830 | 126. 538 | 55.16 | 50.46 |
| Virginia | 355, 880 | 260, 320 | 58.43 | 41.57 | 241,698 | 117, 129 | 66.05 | 44.99 |
| West Vi | 309, 630 | 12,760 | 96.04 | 3.96 | 224,233 | 8,110 | \%2.40 | 63.55 |
| Total 1899-1900 | 6.103.390 | 2,991,100 | 67.15 | 33.85 | 4, 167, 489 | 1,539,507 | 68.28 | 51.46 |
| Tota | a5,132,948 | 2,510,847 | 67.15 | 32.85 | 3, 402, 420 | 1, 290, 9 92 | 67.15 | 32.85 |

$a$ United States Census.

TABLE 2.-Sixieen former slave States and the District of Commbia.

| Year, | Common-school enrollment. |  | Expenditures (botli races). | Year | Common-school enrollment. |  | Expendi- <br> itures (both races). |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White. | Colored. |  |  | White. | Colored. |  |
| 18\%0-71 |  |  | 310, 385, 464 | 1886-87 | 2,9\%5,773 | 1,118, 556 | \$20, 821, 969 |
| $1871-72$ |  |  | 11,623,238 | 1887-88 | 3,110, | 1,140, | 21, 810, 158 |
| 1872-73 |  |  | 11, 176, 048 | 1888-89 | 3, 197, 839 | 1,213,092 | 23,171,878 |
| 1874-75 |  |  | 13,021,514 | 1890-91 | 3,570, 24 | 1,329,519 | 26,690,310 |
| 1875-76 |  |  | 12,033, 885 | 1891-92 | 3,607,549 | 1,354, 316 | 27,691,488 |
| 1876- 77 | 1,827.139 | 571, 596 | 11,231,073 | 1892-93 | 3,697,899 | 1,367,515 | 28,535, 738 |
| 1877-78 | 2,031, 346 | 675, 150 | 12,093,091 | 1898-94 | 3,848,511 | 1,432, 198 | 29,223, 546 |
| 1878-79 | 2,013,684 | 685, 942 | 12, 174, 141 | $1894-95$ | 3,846,267 | 1,423,593 | 29, 443,534 |
| 1879-80 | 2, 215,674 | 784, 709 | 12,678,685 | 1895-96 | 3, 943, 801 |  | 31, 149, 724 |
| 1880-81 | $2,234,877$ $2,249,263$ | 802,374 802,982 | 13,656, 1514 | 1896-97 | $3,937,982$ $4,145,737$ | $1,460,081$ $1,540,749$ | $31,144,801$ $31,247,218$ |
| 1882-83 | 2, 370,110 | 817, 210 | 16,363,471 | 1898-99 |  | 1,511,618 | 31, 319,892 |
| 1883-84 | 2,546,448 | 1,002,313 | 17,884, 558 | 1899 -13 | 4,157,489 | 1,539,507 | 35, 594, 071 |
| $\begin{aligned} & 1884-85 \\ & 1885-86 . \end{aligned}$ | $\begin{array}{r} 2,676,911 \\ 2,778,145 \end{array}$ | $\begin{aligned} & 1,030,463 \\ & 1,048,659 \end{aligned}$ | $\begin{aligned} & 19,253,874 \\ & 20,208,113 \end{aligned}$ | Total | 74, 545, 366 | 27,398,801 | 615, 103, 948 |

$a$ Subject to correction.

TABLE 3．－Teachers and siudents in public high schools for the colored race in 1899－1900．

| Location． | $\left\|\begin{array}{ll} -1 \\ 0 \\ -20 \\ 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ a & 0 \\ z \\ z & 0 \\ z \end{array}\right\|$ | Teachers． |  |  | Pupils enrolled． |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Total． |  |  | Elementary． |  |  | Secondary． |  |  |
|  |  | 㡙 |  |  |  |  | नु̇ ＋1 |  |  | W | 寝 | 号 |  |
| Alabama． | 1 | 1 | 1 | 2 | 25 | 45 | 70 | 0 | 0 | 0 | 25 | 45 | 70 |
| Arkansas | 4 | 6 | 9 | 15 | 282 | 452 | 734 | 199 | 262 | 461 | 83 | 190 | 273 |
| District of Colum | 1 | 19 | 11 | 30 | 198 | 506 | 704 | 0 | 0 | 0 | 198 | 506 | \％ 04 |
| Florida | 2 | 4 | 1 | 5 | 17 | 43 | 60 | 0 | 0 | 0 | 17 | 43 | 60 |
| Georgia | 4 | 4 | 6 | 10 | 184 | 294 | 478 | 170 | 229 | 399 | 14 | 65 | 79 |
| Illinois． | 2 | 2 | 2 | 4 | 23 | 41 | 64 | 0 | 0 | 0 | 23 | 41 | 64 |
| Indiana | 3 | 5 | 2 | 7 | 119 | 159 | 278 | 69 | 87 | 156 | 20 | 72 | 122 |
| Kentucky | 8 | 19 | 22 | 41 | 414 | 711 | 1，125 | 163 | 248 | 411 | 251 | 463 | 714 |
| Maryland | 7 | 5 | ${ }_{6}^{6}$ | 11 | 112 | 350 | 262 | 41 | 0 | 41 | 71 | 150 | 221 |
| Mississippi | 7 | 8 | 8 | 16 | 143 | 363 | 506 | 56 | 56 | 112 | 87 | $30 \%$ | 394 |
| Missouri | 15 | 25 | 7 | 32 | 416 | 736 | 1，152 | 219 | 251 | 470 | 197 | 483 | 682 |
| North Carolina | 3 | 3 | 3 | 6 | 80 | 123 | 203 | 53 | 73 | 126 | 27 | 50 | 77 |
| Pennsylvania． | 1 | 1 | 0 | 1 | 5 | 17 | 23 | 0 | 0 | 0 | 5 | 17 | 22 |
| South Carolina | ？ | 9 | 2 | 11 | 87 | 140 | 227 | 38 | 20 | 58 | 49 | 120 | 169 |
| Tennessee | 8 | 15 | 4 | 19 | 225 | 420 | 645 | 102 | 118 | $2 \% 0$ | 123 | 302 | 425 |
| Texas | 16 | 25 | 13 | 38 | 502 | 739 | 1，241 | 307 | 381 | 658 | 195 | 358 | 553 |
| Virginia | 5 | 6 | 11 | 20 | 127 | 494 | 621 | 18 | 56 | 74 | 109 | 438 | 517 |
| West Virginia | ， | ， | ， | 4 | 16 | 40 | 56 | 0 | 0 | 0 | 16 | 40 | 56 |
| Total | 92 | 161 | 111 | 23 | 2，975 | 5，473 | 8，448 | 1，435 | 1，781 | 3，216 | 1，540 | 3，692 | 5，232 |

TAble 4．－Classification of colored students in public high schools by courses of study，1899－1900．

| Location． | Students in clas－ sical course． |  |  | Students in sci－ entific course． |  |  | Studentsin Eng－ lish course． |  |  | Students in busi－ ness course． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \dot{\oplus} \\ \text { ⿷匚 } \\ \text { घ゙ } \\ \text { H } \end{gathered}$ | $\begin{aligned} & \text { W } \\ & \text { H } \\ & \text { E- } \end{aligned}$ |  |  | $\begin{aligned} & \text { Tin } \\ & \text { Hi } \\ & \hline \end{aligned}$ | $\stackrel{0}{\stackrel{0}{5}}$ | ¢ |  | $\begin{aligned} & \dot{\otimes} \\ & \text { 枈 } \end{aligned}$ | 守 | ＋ |
| Alabama |  |  |  |  |  |  | 25 | 45 | 70 |  |  |  |
| District of Colui | 107 | 29 | 336 | 0 | 6 | 0 | 0 | 0 | 0 | 55 | 39 | 94 |
| Thorida．． | 0 | 0 | 0 | 1 | 2 | 3 | 15 | 35 | 50 | 0 | 0 | 0 |
| Georgia | 9 | 39 | 48 |  |  |  | 75 | 121 | 197 |  |  | － |
| Tllinois ． | 0 | 0 | 0 | 5 | ${ }^{6}$ | 1. | 18 | 35 | 53 | 0 | 0 | 0 |
| Indiana． | 50 | \％ | 12.2 | 0 | 0 | 0 | 3 | 7 | 10 | 0 | 0 | 0 |
| Kentucky | 0 | 13 | 13 | 80 | 143 | 283 | 206 | 2\％3 | 479 | 1 | 5 | 6 |
| Maryland | 0 | 0 | 0 | 40 | 150 | 190 | 71 | 150 | 221 | 0 | 0 | 0 |
| Mississippi | 11 | 30 | 44 | 31 | ${ }^{6}$ | 37 | 79 | 286 | 365 |  |  |  |
| Missouri．－ | 7 | 217 | 294 | 82 | 179 | 261 | 43 | 91 | 134 | 0 | 0 | 0 |
| North Carolina |  |  |  | 6 | 22 | 28 | 63 | 85 | 148 | 0 | 0 | 0 |
| Pennsylvania | 9 | 4 | 13 | 3 | 14 | 17 | 21 | $3{ }^{3}$ | 53 | 0 | 0 | 0 |
| T＇ennesseo． | 15 | 28 | 43 | 13 | 42 | 55 | 65 | 125 | 190 | 0 | 0 | 0 |
| Texas | 4 | 7 | 11 | 127 | 245 | 372 | 122 | 223 | 345 | 0 | ， | 0 |
| Virginia | 0 | 0 | 0 | 5 | 2 | 7 | 97 | 375 | 472 | 0 | 0 | 0 |
| West Virginia． | 9 | 30 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 319 | 764 | 1，083 | 427 | 876 | 1，303 | 905 | 1，883 | 2，788 | 56 | 44 | 100 |

Table 5.-Number of normal students, manual-training students, and graduates in colored high schools in 1899-1900.

| Location. | Students in normal course. |  |  | Pupils receiving mannal training. |  |  | Graduates of highschool course. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. |
| Alabama - |  |  |  |  |  |  | 2 | 8 | 10 |
| Arkansas - ${ }^{\text {District of }}$ - |  |  |  |  |  |  | 14 | 27 | 39 |
| District of Columbia | 0 6 | ${ }_{19}^{0}$ | 25 |  |  |  | $\stackrel{35}{5}$ | 64 | $89$ |
| Georgia- | 5 | 12 | 17 | $\% 6$ | 121 | 197 | 1 | 12 | 13 |
| Illinois . | 0 | 0 | 0 | 0 | 0 |  | 4 | 5 | 9 |
| Indiana. | 0 | 0 | 0 | 0 | ${ }_{\sim}^{0}$ | 0 | 4 | - 4 | 8 |
| Kentucky | 0 | 20 | 20 | 1 | 7 | 8 | 16 | 77 | 93 |
| Maryland | 0 | 0 | ${ }_{0}^{0}$ | 29 | ${ }_{0}^{0}$ | 59 | 16 | ${ }_{\sim}^{12}$ | 28 |
| Mississippi | 1 | 1 | $\stackrel{2}{0}$ | 0 | 0 | ${ }^{0}$ | 7 | 23 | 30 |
| Missouri | 0 | 0 | 0 | 58 | 192 | 250 | 19 | 53 |  |
| North Carolina | 17 | 15 | 32 | 19 | 49 | 63 | 3 | 14 | 17 |
| Pennsylvania- |  |  |  | 0 | 0 | 0 | 1 | 2 |  |
| South Carolina | ${ }_{10}^{0}$ | 0 | 0 | $\frac{1}{5}$ | 11 | $\stackrel{2}{2}$ | 19 | 19 | 2\% |
| Tennessee | 10 | 15 | 25 | 5 | 11 | 16 | 19 | 48 | ${ }^{6 \pi}$ |
| Texas | 3 | 1 | 4 | 0 | 0 | 0 | 16 | 28 | $4{ }_{6} 6$ |
| Virginia -...... | ${ }_{0}^{9}$ | 10 2 | $\begin{array}{r}19 \\ 2 \\ \hline\end{array}$ | 0 0 | 0 0 | 0 0 | 8 | 59 10 | $6 \%$ 14 |
| Total | 51 | 155 | 205 | 219 | 331 | 600 | 180 | 466 | 046 |

Table 6.-Financial summary of the colored public high schools.

Location.

|  | Alabama |
| :---: | :---: |
|  | Arkansas |
|  | District of Columbia |
|  | Florida |
|  | Georgia |
|  | Illinois |
|  | Indiana. |
|  | Kentucky |
|  | Maryland |
|  | Mississippi |
|  | Missouri. |
|  | Nor ${ }^{\text {th }}$ Carolina |
|  | Pennsylvania |
|  | South Carolina |
|  | Tennessee |
|  | Texas. |
|  | Virginia |
|  | West Virginia |

Total

|  | $\text { -Soțiexa!! } \pi!়$ | .suị. odo. stooqos fo roqunn |  | : Su!qxo `ex siooपos รo zəqu्यn上 |  |  |  |  |  | Su!quodox sqooųos fo xoquund |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2,1.20 |  | 5900 |  | 433 2 |  |  |  |  |  |  |  |  |  |  |
| 1 | 1,400 | 1 | 2,200 | 1 | 136,150 |  |  |  |  |  |  |  |  |  |  |
| 1 | 250 | 1 | 500 | 2 | Q, 000 | 1 | s, 100 | 0 | 0 | 0 |  | 0 | 0 | 1 | 2,150 |
| 3 | 380 | 3 | 185 | 3 | 8,200 | 1 | 2,23 |  |  |  |  |  |  | 1 | 2,234 |
| 2 | 218 | , | 466 | - | 28, 000 | 1 | 1,800 |  |  |  |  |  |  | 1 | 1,800 |
| 5 | 2,041 | 5 | 1,720 | 5 | \% 70,500 | - | 1,560 | 1 | 3170 |  |  | 1 | 600 | 1 | 330 |
| , | 375 | 1 | 409 |  |  |  | 1, |  |  |  |  |  |  |  |  |
| 3 | 238 | 3 | 325 | \% | 24,975 |  | 13, 654 | 1 | 100 |  |  |  |  |  | 5,983 |
| 13 | 2,7\% | 13 | 2,375 | 10 | 97, 600 | , | 2,440 |  |  |  |  |  |  | , | 2,440 |
| 1 | 480 | 1 | 190 | 1 | 10,000 |  |  |  |  |  |  |  |  |  |  |
| 2 | 105 | 2 | 130 | - | 11,509 | 2 | 575 | 1 | 62 | , |  | 1 |  |  | 660 |
|  | 1,218 | 7 | 1,230 | 7 | 7x, 200 | , | 1,650 | 1 | 150 | 0 | 0 | 0 | , |  | 1,800 |
| 12 | \%,150 | 12 | 1,57\% | 12 | 113,560 | 5 | 6,190 | 4 | 220 |  |  |  |  | 5 | 6,410 |
| - | 731 | ${ }_{3}$ | 563 | , | 27, 000 |  |  |  |  |  |  |  |  |  |  |
| 3 | 363 | 3 | $2 \%$ | 2 | 19,500 |  |  |  |  |  |  |  |  |  |  |
| 59 | 14,961 | 59 | 13, 041 | $6 \stackrel{3}{2}$ | 661,875 | 21 | 32,253 | 8 | 702 | 2 | $3 \pm 0$ |  | 3,260 | ) | 5 |

Table \％．－Teachers and students in private institutions for the colored race in 1899－1900．


Table 8．－Classification of colored students，by courses of study，in private insti－ intions，1899－1900．

| State． | Students in clas－ sical courses． |  |  | Students in sci－ entific courses． |  |  | Students in Eng－ lish course． |  |  | Students in busi－ ness course． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 突 | 宗 | $\begin{aligned} & \text { Tig } \\ & \text { ثig } \\ & \text { H. } \end{aligned}$ | $\frac{\dot{\oplus}}{\stackrel{y y}{u x}}$ |  |  |  |  |  | $\begin{aligned} & \dot{9} \\ & \text { 亗 } \end{aligned}$ | ¢ | त゙ |
| Alabama | 15 | 2 | 17 | 11 | 28 | 39 | 228 | 354 | 582 | 25 | 7 | 32 |
| Arkansas． | 22 | 11 | 33 | 10 | 11 | 21 | 192 | 228 | 420 | 0 | 0 | 0 |
| Delaware | 0 | 0 | 0 | 11 | 5 | 16 | 1 | 0 | 1 | 0 | 0 | 0 |
| District of Colum | 21 | 4 | 25 | 3 | 0 | 3 | 71 | 70 | 141 | 71 | 70 | 141 |
| Florida | 10 | 16 | 23 | 0 | 0 | 0 | 101 | 98 | 199 | 0 | 0 | 0 |
| Georgia | 64 | 29 | 93 | 37 | 95 | $13 \%$ | 643 | 956 | 1，609 | 7 | 0 | 7 |
| Kentucky | 78 | 43 | 121 | 18 | 16 | 34 | 25 | 48 |  | 0 | 0 | 0 |
| Louisiana | 40 | 54 | 94 | 27 | 42 | 69 | 628 | $87 \%$ | 1，505 | 12 | 11 | 23 |
| Maryland | 31 | 5 | 35 | 0 | 3 | 3 | 84 | 151 | 1235 | 0 | 0 | 0 |
| Mississippi | 43 | 2 | 68 | 42 | 4 | 46 | 595 | 48. | 1，077 | 0 | 0 | 0 |
| Missouri | 9 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Jersey | 0 | ， | 0 | 0 | 0 | 0 | 36 | 49 | 85 | 0 | 0 | 0 |
| North Carolina | 142 | 15 | 157 | 21 | 13 | 34 | 590 | 763 | 1，353 | 0 | 0 | 0 |
| Ohio－． | 51 | 24 | 75 | 0 | 0 | 0 | 0 | 0 | 1， | 0 | 0 | 0 |
| Pennsylvania | 140 | 0 | 140 | 0 | 0 | 0 | 2 | 0 | 2 | 7 | 15 | 22 |
| South Carolina | 122 | 60 | 182 | 2 | 0 | 2 | 601 | 819 | 1，420 | 1 | 0 | 1 |
| Tennessee． | 176 | 71 | 247 | 51 | 59 | 110 | 468 | 625 | 1，093 | 5 | 10 | 15 |
| Texas | 19 | 11 | 30 | 33 | 16 | 49 | 65 | 58 | 123 | 36 | 30 | 66 |
| Virginia | 94 | 64 0 | 158 | 42 | 57 | 99 | 709 0 | 779 0 | 1，488 | 23 0 | 14 | 37 0 |
| Wesu |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1，084 | 434 | 1，518 | 308 | 349 | 657 | 5， 039 | 6，367 | 11，406 | 187 | 157 | 344 |

Table 9.-Number of colored nomal students and graduates in private institutions, 1899-1900.


Table 10.-Cotored professional students and gradnates in prirate institutionss, 1899-1900.

| State. | Students inprofessional courses. |  |  | Frofessional students and graduates. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Theology. |  | Law. |  | Medicine. |  | Dentistry. |  | Pharmacy. |  | Nurse training. |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alabama | 206 | 85 | 241 | 206 |  |  |  |  |  |  |  | 0 | 0 | 35 | 7 |
| Arkansas | 66 | 0 | 66 | 62 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | ${ }_{0}$ |
| Delaware--- | 0 | ${ }^{*}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ${ }^{0}$ | 0 | 11 |
| District of Colum | 323 | 32 | 358 | 56 | 4 | 77 | 18 | 135 | 19 | $3:$ | 8 | 26 | 12 | 32 | 11 |
| Florida... | $1{ }^{163}$ | 0 | 16 | 16 | ${ }^{0}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ${ }^{0}$ | 1 |
| Georgia... | 183 | 6 | $2{ }_{2}^{250}$ | 180 28 | 23 | 3 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 0 0 | 67 0 | $\frac{1}{0}$ |
| Kentucky | 23 41 | ${ }_{12}^{0}$ | 23 53 | 23 9 | 3 3 3 | 0 0 | 0 0 | - 32 | 0 8 | 0 0 | 0 0 | 0 | 0 0 | 120 | 0 |
| Maryland | 19 | 0 | 19 | 19 | ${ }_{5}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mississippi | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blissouri - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Jersey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ${ }^{6}$ |
| North Carolina | 178 | 13 | 191 | 75 | 12 | 15 | 2 | 80 | 13 | 0 | , | 10 | 6 | 13 | 5 |
| Ohio -- | 24 | 0 | 21 | 23 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pennsylvania | 15 | 0 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Carolina | 65 | 0 | 65 | 57 | ${ }^{0}$ | 8 | ${ }_{0}$ | ${ }^{0}$ | ${ }^{0}$ | 0 | ${ }^{0}$ | ${ }_{16}^{0}$ | 0 | 0 | 0 |
| Tennessee | 281 | 0 | 281 | 53 | 14 | 8 | 6 | 185 | 36 | 19 | 2 | 16 | , | 0 | 0 |
| Teras | 41 | 0 | 41 | 41 | 1 | 0 | 0 | 0 | 0 | 0 | , | 0 | 0 | 0 | 0 |
| Virginia | 168 | 0 | 108 | 108 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Virginia | 0 | 0 | , | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $\theta$ |
| Total | 1,502 | 159 | 1,751 | 943 | 104 | 115 | 24 | 434 | 76 | 51 | 10 | 52 | 19 | 159 | 31 |

Table 11．－Industrial training of colored students in private institutions，1899－ 1900.

| State． | Pupils receiv－ ing industrial training． |  |  | Students trained in industrial branches． |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 荡 |  |  |  |  |  |  | $\begin{aligned} & \text { 荷 } \\ & \text { 呆 } \\ & \tilde{\sim} \end{aligned}$ |  |  |  |  |  | S |  |  |
| Alabama | 1，388 | 1，302 | 2，690 | 222 | 183 | 36 | 0 | 29 | 14 | 43 | 62 | 33 | 57 | 765 | 160 | 257 |
| Ariansas | 136 | 280 | 416 | 93 | 34 | 0 | 0 | 4 | 5 | 15 | 10 | 3 |  |  | 133 | 40 |
| Delaware | 26 | 20 | 46 | 12 | 14 | 0 | 0 | 2 | 0 | 4 | 2 | 0 | 3 | 20 | 4 | 0 |
| District of Co－ lumbia | 145 | 116 | 261 | 0 | 81 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 52 | 113 | 0 | 0 |
| Florida． | 154 | 276 | 430 | 138 | 72 | 0 | 0 | 6 | 16 | 0 | 0 | 0 | 2 | 275 | 144 | 21 |
| Georgia | 449 | 2，037 | 2，477 | 79 | 220 | 22 | 9 | 12 | 0 | 34 | 0 | 15 | 87 | ［1，859 | 286 | 149 |
| Kentucky | 89 | 192 | 281 | 72 | 59 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 181 | 70 | 0 |
| Louisiana | 161 | 225 | 386 | 48 | 72 | 0 | 0 | 0 | 11 | 11 | 0 | 0 | 39 | 205 | 44 | 44 |
| Maryland | 31 | 161 | 192 | 31 | 9 | 0 | 0 | 0 | 0 | 3 | 0 | 4 | 11 | 147 | $7 \%$ | 10 |
| Mississipp | $50 \pm$ | 423 | 927 | 153 | 204 | 0 | 0 | 31 | 0 | 20 | 5 | 43 | 5 | 369 | 150 | 89 |
| Missouri．．． | 88 | 89 | $17 \%$ | 0 | 36 | 0 | 0 | 0 | 0 | 34 | 6 | 0 | 18 | 89 | 0 |  |
| New Jerses－．．． | 46 | ${ }^{63}$ | 109 | 1 | 28 | 0 | 0 | 0 | 0 | 0 | ， | 0 | 0 | 41 | 32 |  |
| North Carolina | 530 | 1，029 | 1，559 | 154 | 283 | 40 | 23 | 5 | 1 | 88 | 6 | 21 | 72 | 1，025 | 561 | 13 |
| Ohio－－－．．－－．．．．－ | 10 | 0 177 | －${ }_{\sim}^{8}$ | 0 | 24 | ${ }_{12}$ | 0 | 0 | 0 | 0 0 | 0 | 0 | 0 | 0 | 8 | 12 |
| $\xrightarrow{\text { Pennsylvania }}$ South Carolina | 109 | 170 1,158 | 1，${ }^{272}$ | 110 | 24 278 | 17 | ${ }_{42}$ | 21 | 0 | 50 | 5 | 15 | 11 | 0 1,091 | $\begin{array}{r}87 \\ 234 \\ \hline 1\end{array}$ | 12 |
| Tennessee． | 271 | － 600 | 871 | 85 | 72 | 2 | 1 | 0 | 4 | 2 | 0 | 2 | 73 | ${ }^{1,656}$ | 192 | 4 |
| Texas． | 275 | 401 | 676 | 32 | 15 | 24 | 0 | 2 | 0 | 15 | 15 | 5 | 70 | 358 | 74 |  |
| Virginia | 761 | 1，290 | 2，051 | 573 | 66 | 15 | 16 | 8 | 1 | 55 | 13 | 16 | 52 | 1，114 | 270 | 2 |
| West Virginia． | 40 | 65 | － 105 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ＋40 | 40 |  |
| Total | 5，786 | 9，897 | 15， 683 | 1，804 | 1，765 | 325 | 91 | 120 | 67 |  | 169 |  |  | 8，606 | 2，558 | 1，076 |

Table 12．－Financial summary of the 145 private colored schools．

| State． |  |  |  |  | $\begin{gathered} \text { Şuṭquode.t } \\ \text { stooqos yo tequin } \\ \hline \end{gathered}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | 3 | \＄99，113 | 9 | 17，148 | 9 | \＄22，662 | 9 | \＄520，238 | 3 | \＄17，000 |
| Arkansas | 3 | 735 | 5 | 6， 760 | 5 | 5，200 | 7 | 166， 600 |  | 3，500 |
| Delaware |  |  | 1 | 350 | 1 | 300 | 1 | 27，000 | 1 | 6，000 |
| District of Col |  |  | 2 | 14，745 | 2 | 40，560 | 2 | \％01， 200 | 1 | 35，100 |
| Florida． | ${ }^{2}$ | 2，384 | 5 | 2，728 | 5 | 2，800 | ${ }^{6}$ | 100，044 | 2 | 7，000 |
| Georgia | 12 | 64，583 | 18 | 38，332 | 18 | 34， 260 | 19 | 1，141，712 | 3 | 16，775 |
| Kontucky | 1 | ${ }^{155}{ }^{\text {a }}$ | 3 | 2，704 | 3 | 10，925 | 3 | 88， 369 | 1 | 3，000 |
| Louisiana | 4 | 29，958 | $\stackrel{5}{3}$ | 14,353 4 4 | 5 3 3 | 10，250 | $\stackrel{6}{2}$ | 498，103 | 2 | 10， 240 |
| Maryland | 4 | 10，327 | $\stackrel{3}{9}$ | 4,700 18,400 | ${ }_{9}^{3}$ | － $2,3,350$ | 11 | 44，000 | 2 | 6,500 15,100 |
| Missonri． | 1 | 10， 200 | $\stackrel{ }{ }$ | －2，800 |  | －2，300 | 2 | 120， 800 | 1 | 15，295 |
| New Jersey |  |  |  |  |  |  |  |  |  |  |
| North Caroli | 7 | 43,393 8,699 |  |  |  | 30,375 5,000 | 19 |  | 9 | 18， 102 |
| Ohio－．．．．． | 1 | 8，629 | 1 | 5,000 16,250 | 1 <br> 1 | 5，000 9,000 | 1 | 128， 2000 | 1 | 16，868 |
| South Carolin | 3 | 26，200 | 10 | 15， 600 | 10 | 10， 550 | 10 | 364， 000 | 1 | 150 |
| Tennessee． | 5 | 49，235 | 7 | 19， 718 | 7 | 16，380 | 7 | 804，000 | 3 | 3，8\％0 |
| Texas | $\underset{\sim}{2}$ | 3，208 | ${ }^{6}$ | 11，560 | 6 | 11，900 | 6 | 389，287 | 1 | 15，000 |
| Virginia | 7 | 321， 156 | 12 | 24， 835 | 12 | 14，625 | 14 | 1，554， 800 | 2 | 15，400 |
| West Virginia |  |  | 2 | 6，560 | 2 | 6，000 | 2 | 149， 500 | 2 | 7，750 |
| Total | 56 | 661，486 | 117 | 247，780 | 117 | 244，652 | 128 | 8，261，553 | 39 | 212，950 |

TABLE 12.-Financial summary of the 145 private colored schools-Continued.

| State. |  |  |  |  |  |  | $\begin{gathered} \text { Su!̣fiodex } \\ \text { siooчos јo zequan } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | 8 | \$8,239 | 3 | \$10, 205 | 8 | \$128,259 | 10 | \$163, 703 |
| Arkansas. | 6 | 4,718 | 1 |  | 7 | 16,313 | 7 | 25,331 |
| Delaware |  |  |  |  |  |  |  | 6,000 |
| District of Colum | 1 | 1,009 | $\frac{1}{2}$ | 8,090 | 5 | 6,000 | 2 | 50,100 |
| Florida | ${ }^{6}$ | 2,449 | $\underset{7}{2}$ | 3,100 | 5 | 18,999 | 6 | 31,518 |
| Georgia - | 17 | 21,217 | 7 | 23,373 | 17 | 81,436 | 19 | 142,801 |
| Kentucky | 2 | 2,72\% | 2 | 1,495 | 3 | 9,780 | 3 | 16,997 |
| Louisiana | 5 | 4,400 | 3 | 8,700 | 5 | 16,026 | 6 | 39,369 |
| Maryland | 2 | 2,100 | 1 | 250 | 1 | 7,009 | 3 | 15,850 |
| Mississippi | 8 | 7,083. | 1 | 6,815 | ${ }^{9}$ | 46, 7\%4 | 10 | \%5, 779 |
| Missouri.. | 1 | 1,809 | 1 | 125 | 2 | 3,339 | 1 | 20,559 |
| New Jersey | 1 | 32\% | 1 | 308 | 1 | 5,000 | 1 | 5,635 |
| North Carolina | 12 | 15,97\% | ${ }^{2}$ | 360 | 13 | 32, 780 | 16 | 67,451 |
| Ohio .-. | 1 | 2,364 | 1 | 1,636 | 1 | 6,142 | 1 | 27,010 |
| Pennsylvania | 7 | ${ }_{8}^{1.155}$ | 1 | 21, 280 | 1 | 13,246 | 1 | 35, 78 |
| South Carolina | 7 | 8,908 | 2 | 7,200 | 7 | 29,193 | 8 | 45,51 |
| Tennessee | 5 | 19,018 | 3 | 4,723 | 6 | 68,591 | 5 | ${ }_{62}^{93,17}$ |
| Virginia |  | 15,799 | 6 | 41,393 | 9 | 170, 063 | 13 | 242, 655 |
| West Virginia | 1 | 387 | 1 | 3,123 | 1 | 145 | 2 | 11,40 |
| Total | 99 | 148,506 | 39 | 142, 932 | 102 | 67\%,97\% | 123 | 1,182, 36 |

Table 13.--Public high schools for negrocs-


Teachers, students, courses of study, etc., 1899-1900.


Table 13.-Public high schools for negroes-Teachers.

students, courses of studay, etc., 1899-1900-Continued.


Table 14.-Private schools for negroes-Teachers,

+Statistics of 1897-98.
a No report.
students, courses of study, etc., 1899-1900.


Table 14.-Private schools for negroes-Teachers, students,

courses of study, etc., 1899-1500-Continued.


Table 14.-Private schools for negroes-Teachers, students,

courses of study, etc., 1899-1900-Continued.


Table 14.-Private schools for negroes-Teachers, students,

courses of study, etc., 1899-1900-Continued.


Table 15.-Private schools for negroes-Professional and

industrial training-Equipment and income-1899-1900.


Table 15.-Private schools for negroes-Professional and industrial

training-Equipment and income-1899-1900-Continued.

| Chief sources of support. |  | Volumes in library. |  |  |  | b a゙ <br>  | $\begin{aligned} & \text { Amount received from other } \\ & \text { sources. } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | -9 |  |
|  |  |  |  |  |  |  |  |  |  |
| Amer. Bapt. Home Miss. Soc., Jerual Assn. | \$1,043 |  | 82,500 | 0 | \$455 | 0 | 22,133 | 82,611 | 31 |
| Amer. Miss. Assn. and tuition--... |  |  | 8,000 | 0 |  |  |  |  | 30 |
| Endowment, Amer. Bapt. H.M. Soc. | -28,000 | 2,500 10,500 | 75,000 | 0 | 2, $\begin{array}{r}696 \\ \hline\end{array}$ | \$1,000 | 6,683 | 8,379 | 33 |
| A. M. E. Church and donatio | 28,000 | 10,500 1,500 | 255,000 75,000 | 0 | 2,000 | 1,575 | - 100 | 3,675 10,000 | 31 |
| W.A. H. M. S., Slater Fund | -22, 414 | 3, 400 | 180,000 |  | 3,239 | 300 | 6,608 | 10, $11 \%$ | 35 |
| Tuition and donations | 270 | 100 |  | 0 | 2,134 | 0 | 302 | 2,436 | 37 |
| Presbyterian Church. | 4, 500 | 450 | 20,000 | 0 | 900 | 150 | 4, 450 | 5,500 | 38 |
| M. E. Church South and Colored M. E. Chureh. |  | 500 | 43, 733 |  | 327 |  | 10,111 | 10, 435 | 89 |
| Amer. Bapt. Home Miss. Soc. . |  |  | 4,500 | 15 0 | 585 | 0 | -2,054 | 2,639 | 40 |
| United States .-- -- -- -- - | 0 | 400 | 30, 000 | \$15, 000 | , | 200 | 0 | 15,200 | 41 |
| Tuition, State, and donatio |  | 1,500 | 10,000 | 1,500 | 900 | 975 | 13, 100 | 16,3\%5 | 42 |
| State, private subscription | 300 | 0 | 1,000 | 275 | 60 | 0 | 0 | 335 | 43 |
| Benevolence, tuition | 403 | 1,800 | 12, 900 | 8 | 709 | 0 | 2.947 | 3,656 | 44 |
| Tuition, Amer. Home Miss. Assn .-- | 100 | 2,000 | 40, 000 | 0 | 2,400 | 0 | 4,100 | 6,500 | 45 |
| Missionary Bapt. convention, tuition, contributions. | 3, 500 | 300 | 20,000 | () | 1,000 | 0 | 3,500 | 4,500 | 46 |
| Gifts, tuition, and Amer. Miss. Assn. |  | 200 | 5,000 | 0 | 1,200 |  | 4,200 | 5, 400 | 47 |
| Freedmen's Aid and So. Ed. Soc. of the M. E. Ch. | 1,700 | 1,0c0 | 250, 000 |  | 2,600 |  | 9,400 | 12,000 | 48 |
| Endow ment | 2,160 | $1 \stackrel{9}{2}, 000$ | 100, 000 | 0 | 0 | 19,173 | 2,160 | 21,333 | 49 |
| Amer. Miss. Assn | 153 | 400 | 9,079 |  | $6 \% \%$ |  | 1,000 | 1,6\%* | 50 |
| State, United States |  | 1,704 | 40,465 | 3,000 | 0 | 1,255 | 3,625 | 7,880 | 51 |
| Amer. Miss. Assn | 155 | 500 | 17,90! | 6 | 222 | 210 | 2, 155 | 3, 61 \% | 53 |
| American Christian Missionary Society. |  |  |  |  |  |  | 2, 150 | 3, 61 | 54 |
|  | 58 | 0 | 325 | 0 | 240 | 0 | 33 | 273 | 56 |
| Endowment, Freedmen's Aid So. Ed. Soc., M. E. Ch. |  | 2,000 | 60,000 |  | 500 | 2,400 | 500 | 3, 400 | 57 |
| Endowment.......-.-.-.-.-- --- -- -- | 25,600 | 1,000 | 150,000 | 0 | 0 | 6,000 | 600 | 6,600 | 58 |
| Freedmen's Aid and So. Ed. Soc. of the M. E. Church. | 4, 000 | 5,000 | 125,000 | 240 | 1,800 |  |  | 2,040 | 59 |
| United States and State........-...- |  | 3,853 | 62, $7 \%$ | 10,000 | 260 | 0 | 12,893 | 23, 153 | 60 |
| Contributions | 300 | 2,500 | 100,000 | 0 | 1,600 | 300 | 2,000 | 3,900 | 61 |
| State |  |  |  | 2,000 | 0 | 250 | 0 | 2,250 | 62 |
| Tuition, M. E. Churc | 1,000 | 4, 000 | 27,000 |  | 1,200 |  | 7,000 | 8,200 | 63 |
| Tuition .-- |  | 500 |  |  |  |  |  |  | 64 |
| State and city | $\cdots$ | 200 | 17,000 | 4,500 | $900$ |  |  | 5,400 | 65 66 |

Table 15.-Private schools for negroes-Professional and industrial

training-Equipment and income-1899-1800-Continued.

| Chief sources of support. |  | Volumes in library. |  |  |  | Amount received from pro- ductive funds. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 22 | 93 | 24 | 25 | 26 | 27 | 28 | 29 |  |
| Tuition, donations | \$1,000 | 400 | \$25, 000 | 0 | \$400 |  | \$1,000 | \$1,400 | $6 \%$ |
| Tuition, American Christian Missionary Society. | 4,000 | 1,900 | 35,000 | 0 | 150 | 0 | 3, 850 | 4,000 | 68 |
|  | 0 | 3, 500 | 12, 000 | \$2, 250 | 467 | 0 |  | 2, \%1\% | 69 |
| M. E. Church, tuition | 5,759 | , 300 | 135, 000 |  | 1,474 |  | 4,751 | 6, 235 | 70 |
| Amer. Bapt. Home Miss. Society | 174 | 1,000 | 35, 000 |  | 498 |  | 141 | 639 | 71 |
| Amer. Miss. Assn. and tuition -- |  | 300 | 3,000 |  |  |  |  |  | 72 |
| F. A. S. Ed. Soc. and tuition.- |  |  | 4,000 |  | 679 |  | 171 | 850 | 73 |
| Baptist Church . |  |  | 15,000 |  | 600 |  | 2700 | 1,300 | 74 |
| Amer. Miss. Assn |  | 4, 000 | 80, 000 |  |  |  | 15,000 | 15,000 | 73 |
| State and United States |  | 500 7,200 | 40,000 130,000 | 12,850 | 2,815 | \$6, 815 | 2, 19,161 | 4,815 38,826 | 76 77 |
| State and United States. |  | 300 | 70, 800 | 15,295 |  |  | 1,339 | 10, 634 | 78 |
| Freedmen's Aid and So. Ed.Soc. of the M.E.Ch. | 200 | 2,500 | 50, 0000 | 15, | 1,800 | 125 | 2,000 | 3, 902 | 79 |
| State |  |  |  |  | $39 \%$ | 3018 | 5, 000 | 5,635 | 80 |
| Bequests and private subscriptions |  |  | 6,000 |  |  |  |  |  | 81 |
| Presbyterian Church ...--......- |  | 12, 500 | 150,000 |  |  |  |  |  | 89 83 |
| Nortbern Presbyterian Church, tuition. <br> State $\qquad$ | 11,000 | 2,600 150 | 65,000 1,500 | 0 2,000 | 618 | 100 | 5, 000 | 5,718 2,000 | 83 84 |
| State and Peabody fun |  | 128 | 3, 700 | 2,100 |  |  | 100 | 2,200 | 85 |
| State and United State |  | $7 \% 5$ | 66, 600 | 7,500 | 350 |  | 8,954 | 16,801 | 88 |
| Now York Yearly Meeting of Friends. |  | 500 | 13,000 | 1,200 |  |  | 2,000 | 3,200 | 89 |
| Amer. Miss. Assn-.-. - - - - - - - - - - - |  | 800 | 55, 000 | 220 | 25. | 0 |  | $47 \%$ | 90 |
| Tuition | 75 | 450 300 | 1,200 |  | 1,500 |  | 75 250 | 1,750 | 91 92 |
| State |  |  | 0 | 1,875 |  |  | 100 | 1,9\% | 93 |
| Church, endowment, tuition .-...- | 6,000 | 2,000 | 50,000 |  | 2,600 |  |  | 2,600 | 94 |
| Amer. Bapt. Home Mission Society, Slater find , tuition. | 12,873 | 2,000 | 90,000 | 0 | 8,158 |  | 154 | 8,312 | 95 |
| A. M. E. Z. Church and donations.-- | 4,000 | 5,000 | 125, 000 | 50 | 500 | 200 | 5,500 | 6,250 | 96 |
| Amer. Miss. Assn., tuition .-...-..... | 300 | 200 | 15,000 | 0 | 1,100 |  | 2,900 | 4,000 | 97 |
| Tuition and benevolenc | 525 | 754 | 11, 000 |  | 250 |  | -525 | 375 | 99 |
|  |  |  | 20, 000 | 3,257 | 219 |  | 5,553 | 9,029 | 100 |
| Amer. Bapt. Home Mission Society. |  | 300 | 12,000 | 200 | 300 |  | 1,669 | 2,169 | 101 |

Table 15.-Private schools for negroes-Professional and industrial

training-Equipment and income-1899-1900-Continued.


TABLE 15.-Private schools for negroes-Professional and industrial

*Statistics of 1898-99.
training-Equipment and income-1899-1900-Continued.

| Chief sources of support. |  | Volumes in library. |  |  <br> CH <br>  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 28 | 23 | 24 | 25 | 2¢ | 27 | 28 | 29 |  |
| Benefactions | 83, 240 | 300 | \$16,000 |  |  |  | \$5.500 | 85,500 | 137 |
| United Presbyterian Church -- |  | 1,000 | 60,000 | 0 | 31,70 | 0 | r, 410 | 9,110 | 138 |
| Endowment and contributions | 4,000 | 1,500 | 18, 000 |  |  |  | 4,000 | 4, 000 | 139 |
| State |  | 583 | $10)^{* \prime \prime}, 000$ | 20, 060 | 1, .03 | 8072 | 300 | 17,0\% | 143 |
| Amer. Bapt. Home Mission Soc. | 1,005 | 1,000 | 50,000 | 0 | 1,048 |  | 3,250 | 4,298 | 111 |
| Amer. Bapt. Home Mission Society. | 52,2\%8 | 7,007 | 300,000 |  | 1,200 | 4, 000 |  | 5, 200 | 112 |
| Free Bapt. W. Miss. Soc., endow- |  | 5, 000 | 50,000 | 1,000 | $38 \%$ | 3,123 | 0 | 4,510 | 14. |
|  |  | 1,560 | 99,500 | 6,750 | 0 | 0 | 125 | 6, 825 | 145 |

## CHAPTER XLII.

## STATISTICS OF REFORM SOHOOLS.

Reports were received from 80 of the 88 reform schools known to this Offce for the year 1899-1900.

In these schools 533 instructors were employed. There were 21,626 pupils attend. ing school and 14,673 in industrial departments. The total number of inmates was 23,501 . The value of grounds and buildings was $\$ 17,504,444$. The expenditures on buildings and grounds amotnted to $\$ 5.6,344$; for salaries and other expenses, $\$ 3,25 \frac{1}{2}, 690$. The number of assistants, not including instructors in school departments, was 1,569 . There were 20,270 white inmates and 2,695 colored inmates and $92 \%$ not reported as to race; 9,075 were of native parents and 6,324 of foreignborn parents. Those that could only read when admitted were 8,833, and 1,6ist could neither read nor write.

The number committed to the institutions during the year was 12, \%50 and the number discharged 13,158. When discharged from the schools many of the pupils possessed a trade and were provided for in good homes; nearly all could read and write; the majority had received the equivalent of a common-school education.

The North Atlantic Division reports 33 schools, 243 instructors, 10,009 pupils in school departments, and 6,900 in industrial departments. The number of inmates reported was 10,683 , of which number 9,053 were males and 1,631 females. The value of grounds and buildings was $\$ 7,2 \pi \%, 725$. The expenditures our grounds and buildings amounted to $\$ 169,23 \widetilde{\text {; }}$; for salaries and other expensés, $\$ 1,458,120$, making a total expenditure of $\$ 1,527,405$.

The South Atlantic Division reports 10 schools, 46 instructors, 1,819 pupils in school departments, and 1,095 in the industrial departments. Of the 1,819 inmates reported, 1,604 were males and 215 fema'es. The total value of grounds and buildings was $\$ 1,353,802$. The amount expended for buildings aud improvements was $\$ 33,244$; for salaries and other expenses, $\$ 163,404$, making a lotal expenditure of $\$ 196,648$.

The South Central Division reports 4 schools, 25 instructors, 1,022 pupils in school departments, and 885 in industrial dopartments; totail number of inmates, 1,206. Of this number 793 are males and 473 females. The value of grounds and buildings was $\$ 35,000$. The total amount expended was $\$ 93,614$-for buildings and improvements, $\$ 12,497$, and for salaries and other expenses, $\$ 86,117$.

The North Central Division reports 27 schools, 199 instructors, 7,711 pupils in school departments, and 6,189 in industrial departments. The total number of inmates reported was 9,053 , of which number 6,542 were ma'es and 2,514 females. The value of grounds and buildings was $\$ 8,06 \%, 000$. The amount expended was $\$ 1,644,710$ - for buildings and improvements, $\$ 303,783$, and for salaries and other expenses, $\$ 1,310,02 \%$.

The Western Division reports 6 schoois, 25 instructors, 915 pupils in school departments, and 877 in industrial. The value of grounds and buildings was $\$ 7 \% 0,908$. The amount expended was $\$ 263,67 \%$-for buildings and improrements, $\$ 57,535$, and for salar:es and other expenses, $\$ 200,122$.

Table 1．－summary of statistics of reform schools，1899－1900．

| State or Teritors． |  |  |  |  | Inmates． |  |  |  | Expenditures． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| r | 2 | 8 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $1{ }^{1}$ |
| United States | 80 | วิ¢ | 21，626 | 15，946 | 18，963 | 4，933 | 23， 901 | \＄17，504， 444 | \＄5\％6，344 | \＄3，254， 690 |
| North Atlantic Division | 33 | 243 | 19，099 | 6，900 | 9， 052 | 1，631 | 10，683 | 7，277， 725 | 169，285 | 1，458，120 |
| South Atlantic Division－ | 10 | 46 | 1，819 | 1，095 | 1，604 | 215 | 1，819 | 1， 353,802 | 33，244 | 163， 404 |
| South Central Division－－ | 4 | 25 | 1，022 | 885 | 793 | 473 | 1，206 | 35，000 | 12，497 | 86，117 |
| North Central Division．－ | 27 | 199 | 7，771 | 6，189 | 6，542 | 2，514 | 9，056 | 8，067，009 | 303， 783 | 1，340，927 |
| Western Division | 6 | 25 | 915 | 877 | 977 | 100 | 1，077 | 7\％0，908 | 57，535 | 205，122 |
| North Atlantic Division： Maine | 2 | 7 | 220 | 220 | 135 | 85 | 220 | 185， 000 | 10，360 | 13，000 |
| New Kampshire | 1 | 3 | 122 | 122 | 102 | 20 | 122 | 100，000 |  |  |
| Vermont |  |  | 154 |  | 125 | 29 | 154 | 20，772 |  | 20，875 |
| Massachusetts | 11 | 47 | 1．105 | 920 | 934 | 171 | 1，105 | 825， 432 | 79，098 | 206， 773 |
| Rhode Island |  | ${ }^{6}$ | 363 | 109 | 228 | 42 | 370 | 223， 700 |  | 59， 012 |
| Connecticut | 2 | 17 | －689 | ${ }^{322}$ | 430 | 259 | －689 | 450，000 | 5，129 | 109， 180 |
| New Yorik． |  | 110 | 4，800 | 3，963 | 4，639 | 590 | 5，229 | 4，190， 748 | 27，030 | 599， 198 |
| New Jersey | 3 | 1.5 | ${ }^{732}$ | ${ }_{9}^{291}$ | 1， 76.5 | ${ }_{271}^{164}$ | ： 2,038 | 488， 432 793,641 | 15，631 | 110，190 |
| Pennsylvania th Atlantic Division： | 4 | 29 | 1，909 |  | 1，765 |  | 2,036 | 193， 641 | 32， 097 | 339，398 |
| Delaware．．．． | 2 | 2 | 82 | 41 | c5 | 17 | 82 | 65，000 | 1，100 | 17，\％00 |
| Maryland | 5 | \％ | 1，183 | 707 | 987 | 198 | 1，185 | 1，195， 000 | 20，900 | 111，818 |
| District of Colum |  |  |  | 206 | 206 | 0 |  |  |  |  |
| Virginia－－．－ | 1 | 2 4 | 125 | 70 | 125 221 | 0 |  | 8,802 70,100 | 400 10,844 | 11， 22.6 |
| West Virginia－ | 1 | 4 | 221 | 1 | 221 | 0 | 221 |  |  |  |
| South Carolina |  |  |  |  |  |  |  |  |  |  |
| Georgia |  |  |  |  |  |  |  |  |  |  |
| Florida－－ |  |  |  |  |  |  |  |  |  |  |
| Kentacky | 1 | 6 | 900 | 200 | 0 | 249 | 249 |  |  |  |
| Tennessee | 1 | 14 | 760 | 685 | 526 | 224 | 760 |  | 2，497 | 8，132 |
| Alabama |  |  |  |  |  |  |  |  |  |  |
| Louisiana | 1 | 1 | 62 |  | 67 | 0 | 67 | 35， 000 | 0 | 985 |
| Texas． | 1 | 4 |  |  | 190 | 0 | 190 |  |  |  |
| Arkansas |  |  |  |  |  |  |  |  |  |  |
| Oklahoma－－－．．．． |  |  |  |  |  |  |  |  |  |  |
| Indian Territory ．－．．． |  |  |  |  |  |  |  |  |  |  |
| North Central Division： |  |  |  | 1，263 | 1，397 |  |  | 9.0 |  |  |
| Indiaua | 2 | 8 | 790 | 488 | 1.52 | 180 | 700 | 307， 447 | 5，617 | 94，540 |
| Tllinois． | 5 | 35 | 1，546 | 1，7\％6 | 1，855 | 279 | 2，134 | 1，550， 477 | 36，994 | 275， 180 |
| Michigan | 3 | 47 | 1，095 | 627 | $65 \%$ | 702 | 1，369 | 474，003 | 26，732 | 115， 442 |
| Wisconsin | 2 | 18 | 646 | 558 | 316 | 242 | 558 | 379， 496 | 71， 768 | 126， 253 |
| Minnes | 2 | 18 | 530 | 370 | 459 | 73 | 532 | 625，500 | 22，913 | 119，292 |
| Iowa． | 2 | 16 | 621 | 519 | 435 | 164 | 619 | 314， 334 | 11， 000 | 77，010 |
| Missouri | 3 | 14 | 863 | 825 | 682 | 199 | 881 | 540， 000 | 18，200 | 141，280 |
| North Dakota |  |  |  |  |  |  |  |  |  |  |
| South Dal Nebraska | 1 |  |  |  |  |  |  |  |  |  |
| Nebraska．．．．．－ | 1 | 3 | ${ }_{12 \%}^{189}$ | 103 1.27 | 126 0 | $\begin{array}{r}68 \\ 12 \% \\ \hline\end{array}$ | 189 127 | $\begin{aligned} & 665,000 \\ & 110,000 \end{aligned}$ | $\begin{aligned} & 3,000 \\ & 2,500 \end{aligned}$ | 36,500 20,853 |
| Western Division：${ }^{\text {c－－－－－－－}}$ |  |  |  |  |  |  |  |  |  |  |
| Montana－ | 1 | 13 | 3 | 3 | 65 | 10 | $\%$ | 60，000 |  |  |
| Wyomin | 1 | 3 | 164 | 164 | 161 | 0 | 164 | 125， 000 |  |  |
| New Mexico． |  |  |  |  |  |  |  |  |  |  |
| Arizona－－．－．－．．．．．．．．－ |  |  |  |  |  |  |  |  |  |  |
| Utah |  |  |  |  | －－1．． | － | － | －－－．－． | －．．．．．．． |  |
| Nevada－．．．．．．．．－．．．．．．．． |  |  |  |  |  |  |  |  |  |  |
| Nevada－．．．．．．．．．．．．．．．．．．．．－．－ |  |  |  |  |  |  |  |  |  |  |
| Washing | －17 |  | 7 ${ }^{-113}$ |  |  | 48 |  |  |  |  |
| Oregon－－ |  |  | \％ 563 | 113 | 0 48 | 113 563 | $\begin{aligned} & 100,000 \\ & 485,908 \end{aligned}$ | 57，535 | 188，622 |
|  |  |  |  |  | 48 |  | 405， 0 | 37，305 | 18，623 |

Table 2.-Summary of statistics of reform schools, 1899-1900.

| State or Territory. |  | Race. |  | Nativity. |  | Illiteracy. |  | During year. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { \& } \\ & \dot{7} \\ & \text { B } \end{aligned}$ |  |  |  |  |  |  |  |
| 1 | \% | 3 | 4 | 5 | $6^{6}$ | \% | 8 | 9 | 19 |
| United State | 1,569 | 20,278 | 2,695 | 9,075 | 6,924 | 3,833 | 1,674 | 12, 750 | 13,158 |
| North Atlantic Division .South Atlantic Division South Central Division ... North Ceutral Division ... Western Division | $\begin{gathered} 480 \\ 116 \\ 90 \\ 745 \\ 128 \end{gathered}$ | $\begin{aligned} & 9,469 \\ & 1,291 \\ & 1,016 \\ & 7,658 \\ & 845 \end{aligned}$ | $\begin{array}{r} 947 \\ 5.8 \\ 147 \\ 1,005 \\ \hline 68 \end{array}$ | $\begin{array}{r} 3,146 \\ 1,238 \\ 179 \\ 3,981 \\ 531 \end{array}$ | $\begin{array}{r} 3,442 \\ 140 \\ 137 \\ 2,887 \\ 318 \end{array}$ | $\begin{array}{r} 1,385 \\ 686 \\ 0 \\ 1,4,6 \\ 286 \end{array}$ | $\begin{array}{r} 699 \\ 142 \\ 5 \\ 506 \\ 22 \end{array}$ | $\begin{array}{r} 6,055 \\ 775 \\ 606 \\ 4,991 \\ 8283 \end{array}$ | $\begin{array}{r} 6,615 \\ 807 \\ 614 \\ 4,778 \\ 344 \end{array}$ |
| North Atlantic Division: <br> Maine <br> New Hampshire <br> Vermont. <br> Massachusects. <br> Rhode Island $\qquad$ <br> Connecticut $\qquad$ <br> New York $\qquad$ <br> New Jorsey <br> Pennsylvania $\qquad$ | 10 11 13 111 24 67 77 38 119 | $\begin{array}{r} 196 \\ 121 \\ 148 \\ 1,060 \\ 335 \\ 623 \\ 4,881 \\ 407 \\ 1,695 \end{array}$ | $\begin{array}{r} 3 \\ 1 \\ 6 \\ 44 \\ 35 \\ 64 \\ 343 \\ 110 \\ 341 \end{array}$ | 207 87 35 1,526 187 1,104 | 487 259 16 1,927 320 433 | 25 3 24 248 429 79 50 126 | $\begin{array}{r} 30 \\ 29 \\ 6 \\ 2 \\ 259 \\ 253 \\ 340 \end{array}$ | $\begin{array}{r} 52 \\ 34 \\ 60 \\ 781 \\ 295 \\ 280 \\ 3,617 \\ 190 \\ 746 \end{array}$ | 50 47 55 838 343 899 3,894 899 839 |
| South Atlantic Division: <br> Delaware <br> Maryland <br> District of Columbia <br> Virginia <br> West Virginia <br> North Carolina <br> South Carolina <br> Georgia | 14 35 32 13 22 | 57 833 86 185 100 | $\begin{array}{r} 25 \\ 332 \\ 1: 0 \\ 0 \\ 31 \end{array}$ | $\begin{array}{r} 66 \\ 997 \\ 175 \\ 0 \end{array}$ | $\begin{array}{r} 16 \\ 93 \\ 31 \\ 0 \end{array}$ | $\begin{array}{r} 23 \\ 505 \\ 116 \\ 42 \end{array}$ | 13 22 90 90 17 | $\begin{array}{r} 35 \\ 499 \\ 64 \\ 70 \\ 107 \end{array}$ | 44 585 107 54 68 |
| South Central Division: <br> Kentucky. <br> Tennessee $\qquad$ <br> Alabama . $\qquad$ <br> Mississippi | 21 51 | $\begin{aligned} & 248 \\ & 657 \end{aligned}$ | 1 | 114 | 135 |  |  | 44 292 | 2\% ${ }^{35}$ |
|  | 14 | $\begin{aligned} & 21 \\ & 90 \end{aligned}$ | $\begin{array}{r} 46 \\ 100 \end{array}$ | 65 | 2 |  | 5 | $2 \%$ | 302 |
| Indian Territory-...- North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohio................. | 199 | 1,639 | 225 | 569 | 470 | 619 | 131 | 1,061 | 1,126 |
| Indiana | 46 | 597 | 103 | 510 | 45 | 129 | 61 | 228 | , |
| Illinois .. | 99 | 1,840 | 294 | 1,204 | 882 | 565 | 321 | 1,681 | 1,483 |
| Michigan | 73 | 926 | 43 | 270 | 619 | ${ }_{25}^{35}$ | 49 6 | ${ }^{433}$ | 4 |
| Minnesota. | 69 | 514 | 18 | 153 | 235 |  |  | 285 | 117 |
| Iowa ... | 46 | 532 | 87 | 503 | 116 | 9 | $15^{\circ}$ | 193 | 209 |
| Missouri North Dazota | 93 | 711 | $1 \% 0$ | 330 | 113 | 18 | 16 | 686 | 681 |
| South Dakota Nebraska | $\begin{aligned} & -7 i \\ & 42 \\ & 42 \end{aligned}$ | -82 | 1 | $\begin{array}{r} 80 \\ 115 \end{array}$ | $\begin{gathered} 2 \\ 48 \end{gathered}$ | \% ${ }^{7}$ | ${ }_{3}^{4}$ | 101 |  |
| Kansas. | 8 | 96 | 31 |  |  |  |  |  |  |
| Western Division: Montana. Wyorning | 11 | 72 | 3 | 40 | 35 | 12 | 18 | 52 | 51 |
| Colorado--- <br> New Mexico | 16 | 14 | 20 | 100 | 64 | 164 |  | 100 | 100 |
| Arizona .... |  |  |  |  |  |  |  |  |  |
| Nevada Idaho |  |  |  |  |  |  |  |  |  |
| Washington | 7 |  |  |  |  |  |  |  |  |
|  | 14 90 | $\frac{111}{511}$ | $\stackrel{2}{4}$ | $30$ | $\begin{gathered} 33 \\ 186 \end{gathered}$ | 110 0 | 3 1 | 50 121 | 25 168 |


| Post-office. | Name. | Executive officer. | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { assist- } \\ \text { ants. } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
| 1 | 2 | 3 | 45 | 6 |
| Whittisr, Cal. | City and Comenty Industrial | Sherman Smith | 42 | 658 |
| Waterman, C | Preston School of Indust | D.S. Hirshberry | 2210 | 10 |
| Golden, Colo | The State Industrial School | Barnard I. Olds. | 142 | 216 |
| Meriden, Conn | Connecticut School for Boys | Charles M. Williams | 2120 |  |
| Middletown, Conn | Connecticrat Industrial School | William G. Fairbank |  | 9 |
| Clayton, Del. | St. Joseph's Industrial School | No report |  |  |
| Marshaliton, Del | The Ferris Industrial School. | A.S. Meser |  | 11 |
| Wilmington, Del | Delaware Industrial School for | Mirs. E. S. Jackso |  |  |
| Washington, D. C | Reform School of the District of | G. A. Shallenberger | 2810 | - 32 |
| Augusta, Ga | Richmond County Reformatory | No report |  |  |
| Chicago, 111 | Institute. <br> The Erring Woman's Refuge for了eform. | Helen M. Woo |  |  |
|  | John Worthy Manual Training | Jobn J. Sloan |  | 3 |
| Gencva, Ill | State Home for Juvenile Female | Ophelia L. Amigh | 020 | 0 |
| Gienwood, Ill | Ilinois Manual Training School | Oscar L. Dudley |  |  |
| Pontiac, 111. | Farm. | George Torran |  | 0 |
| South Evanston, 11 | nlinois Industrial School for | No report |  |  |
| Indianapolis, Ind | The Indiana Industrial School | Garah F. Keele | (1) 13 |  |
| Plainfiold, Ind | Indiana Reform School for Boys.- | Thomas J. Charlion |  | 1 |
| Eldora,Iowa- | Iowa Industrial School .-...---... | 3. J. Miles....-....... | 1810 |  |
| Mitchellville, Iowa | Iowa Industrial School (girls' de- | F.P.Fitzgeral | 18 | 818 |
| Beloit, Kans | Industrial School for Girls .-..... | Fester A. Fanback |  |  |
| North Topeka, Kans | State Industrial School for Boys. | No repor |  |  |
| Louisville, Ky ......- | Industrial School oif Reform-...- | No report |  |  |
| Newport, Ky | Convent of the Good Shepherd of Newport. | Mother M. Baptist Jackson. | 1. 20 | d |
| New Orleans, La | Boys' House of Refuge | Michael J. Mokler |  |  |
| Haliowell, M | Maine Industrial school for Cirls- | Niss Harriet A. Leavill |  |  |
| Portland, Me | State Reform School .-............. | Edwia P. Wentworth |  |  |
| Baltimore, M | Houss of Refuge ---...- | Joseph Moiris Fisher - |  |  |
| Baltimore (Sta.D), Mă | St. Mary's Industrial school for' | Brother Dom |  | 0 |
| Cheltenham. Mid. | Boys of Baltimore, Md. Honse of Reformation |  |  |  |
| Melvale, Md..... | Industrial Home for Colcred |  |  |  |
|  |  |  |  |  |
| Rainsford Island, Boston, Mass. | House of Reforma |  |  |  |
| Goshen, Mass | Hampsbire and Franklin Coun- <br> ties Truant School | W. A. Bartus .-...... |  |  |
| Lancaster, Mass | State Industrial School for Girls. | Mrs.L.L. Brackett | 018 | 818 |
| Lawrence, Mass.-....- | Essex County Truant School. .-.- | Heniy E.Swan... | 34 | 4 |
| North Chelmsford, Mass. | Middlesex County Truant School. | Moses A. Warren |  | 710 |
| Oakdale, Mass | Worcester County Truant School. | Frank Leroy Jolinson- |  |  |
| Salem, Mass | Plummer Farm School ---.---...- | Charles A.Johnson.- |  |  |
| Springfield, Mass Walpole, Mass. | Hampden County Truant School. | Erwin G. Ward....... Aaron R. Morse |  |  |
| Walpole, Mass.--....-. | Nolfolk, Piymouth, and Bristol Union'Truant School. | Aaron R. Morso . |  |  |
| Westboro Mass | Lyman Schosl for Boys. | Theodore F.Chapin. | ${ }^{9} 11$ | \% |
| West Roxbury, Mass.- | Parental School --.............-... | B. Clifton Day | 4 | 7 |
| Adrian, Mich | State Industrial Home for Girls.- |  | ${ }^{0} 0$ | 0 |
| Detroit, Mich | Hoase of the Good Shepl | Mother Mary of $\mathfrak{S t}$. Scholastica. | -- 33 | 3 |





## CHAPTER XLIV.

SCHOOLS FOR THE DEFECTIVE CLASSES.

The sixty-fifth nunual report of the New York Institution for the Blind contains a fow interesting paragraphs on the use of the kleidograph, a machine with typewriter keys which enables the operator to produce embossed printed matter which may be read by the touch. It is maintained that the introduction of this machine marks a new period in the education of the blind, and is the greatest aid to language study ever brought into use for those who can not see. The following extract is taken from the report of the principal of the school, Mr. William B. Wait:

The study of language constitutez one of the chief pursuits in school life. It is not only an important end, but is, in fact, the chief means in all educational work. The stradent who can see uses language in every form-spoken, written, and priated-while pencil and paper, pen andink, blackboard and chalk, together with numberless books, are all supplied free, or can be obtained at almost nominal cost. Against this array of advantages the blind primarily have spoken language only; and so in the beginning of their education the instruction was almost entirely oral. Later, punctugraphic handwriting, by means of a stylet and tablet, was devised, and this gave a new and most important means of expression. The ratio of the utility of the stylus and embossing tablet to that of the slate and pencil in general school work, however, is about as 1 to 100, and hence it was not mentil the introduction of the typewriting machine, supplemented to a limited extent by stylet writing, that an advance upon the oral method was gained. The typewriter keyboard is readily learned, and a whole class soon acquires the means of facile expression, thus greatly increasiug the amount of language work that can be done in a given time, and in such form that class papers can be readily examined and criticised by the teacher.

Plane surface writing, however, has no tangible power, and hence it is clear that the chief advantage of typewriting to the student comes from the application of his knowledge during the exercise itself, and not firom auy direct use he can make of the paper he has written.

Although the advantages of facile expression afforded by the typewriting machine to both teachers and pupils have been very great, it is obvious that without some means of facile tengible writing our resources would ever be incomplete and inadequato.

In addition to many other contributions which this institution has made in promoting the education of the bind, it has overcome the last remaining difficulty mentioned above through the kleicograph, a machine which enables the blind student to write with facility in an embossed form, readable by touch. As language is not only the foundation of education, but the means by which all education proceeds, the important place which the kleidograph holds will at once be appreciated. This sketch briefly outlines the stages of progress and the methods of advance in this line of our work.

During the past year our facilities in this department have been strengthened. by the addition of 20 new writing machines of the letter-press type, making 35 in all now at command for class purposes. These, together with 70 kleidographs, constitute an equipment unequaled by any school in the world.

The development of touch for the purpose of reading has always been a matter of deepest interest and large importance in all schools for the blind, but it has been a dificuit matter to prescribe an orderly and satisiactory method for this work at all c mparable with the methods pursued in teaching other subjects.

All embossed books are very expensive, and the work to be done within the period of schcol life is great and covers a wide feld, so that it is important to attain satisfactory results within the shortest possible time.

Schools for the blind.-The total number of schools reported to this Office for the scholastic year 1890-1900, was 37; number of instructors, 437-male 144, and female 293; in music 142, and in the industrial departments 106 . The total number of pupils was 4,021 -male, 2.101; female, 1,917. In the kindergarten, 429; in vocal music, 1,815 ; in instrumental music, 1,883. The industrial department reported 2,235 . The total number of volumes in the libraries was 94,689 . The value of scientific instruments was $\$ 88,928$, and the value of grounds and buildings $\$ 3,316,212$. The total expenditures were $\$ 990,711$.

Schools for the deaf.-There are represented in this report 114 schoois for the deaf, with 1,181 instructors and $11,10 \pm$ pupils. The 55 State public schools report 1,012 instractors-male 344, and female 668; in articulation, 403; anral development, 90 ; and in the industrial departments, $26 \%$. The total number of pupils reported was $9,78 \%$, of which number 4,342 were taught by the combined system, 2,978 by the purely oral method, and 3,150 by the manual method; 696 were taught in kindergartens. The number of graduates was 393. The libraries of these institutions contained 90,239 volumes. The value of scientific apparatus was $\$ 21,080$; of grounds and buildings, $\$ 12,115,8 \% 6$. The total expenditures amounted to $81,863,126$.

The private schools for the deaf reported were 17 ; the number of instructors, $73-45$ in articulation, 11 in aur 11 development, and 26 in industrial department. The number of pupils reported was 478 , of which number 281 were taught by the combined system, 185 by the purely oral method, and 10 by the manual method; 42 were taught in the kindergartens.

The 41 day schools for the deaf report 93 instructors- 83 in articulation, 29 in aural development, and 23 in industrial departments. Tho number of pupils reported was 749, of which number 124 were taught by the combined system, 609 by the purely oral method, and 12 by the manual method. The number taught in the kindergartens was 43. There were 3 graduates. Expenditures amounted to 857, r14. There was an increase of 10 schools in day sehools reported, the greatest increase being in Wisconsin.

Schools for the feevle-minded. -The number of schools reported was 29, with 304 instructors in the school departments, 208 in industrial departments, and 764 assistants in caring for the inmates. The number of pupils reported was 11,217, of which number 1,103 were instructed in the kindergarten and 2,149 in music. The 19 State public schools reported 248 instructors in school departments, 171 in industrial departments, and 702 assistants caring for the inmates. The momber of pupils reported was 9,692 . Of these, 932 were in kindergartens and 1,995 in nusic. The value of grounds and buildings was $\$ 3,608,198$, and the expenditures were $\$ 1,400,783$.

Table 1.-Summary of statistics of schools for the blind, 1899-1900.


Table 2.-Summary of statistics of schools for the blind, 1899-1000.

| States and Territories. | Pupils. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Vocal music. | Instrumental music. | Kindergarten. | $\begin{gathered} \text { Gradu- } \\ \text { ates, } \\ 1899-190 . \end{gathered}$ | Industrial department. |
| 1 | 2 | 3 | 4 | 5 | 6 | $g$ | 8 | 9 |
| United States. | 2,104 | 1,917 | 4,021 | 1,815 | 1,883 | 429 | 171 | 2,235 |
| North Atlantic Division.- | 408 | 357 | 765 | 157 | 260 | 126 | 36 | 408 |
| South Atlantic Division.- | 339 | 274 | 613 | 396 | 352 | 49 | 19 | 452 |
| South Central Division--- | 419 | 478 | 897 | 502 | 360 | 99 | 23 | 460 |
| North Central Division .- | 849 | 730 | 1,579 | $72 \%$ | 826 | 155 | 88 | 839 |
| Western Division......... | 89 | 78 | 167 | 33 | 85 | 0 | 5 | 76 |
| North Atlantic Division: <br> Maine $\qquad$ |  |  |  |  |  |  |  |  |
| New Hampshire ------- |  |  |  |  |  |  |  |  |
| Vermont --------...... |  |  |  |  |  |  |  |  |
| Massachusetts Rhode Island | 118 | 116 | 234 | 21 | 103 | 78 | 7 | 187 |
| Connecticut.- |  |  |  |  |  |  |  |  |
| New York-- | 193 | 143 | 336 | 5 | $\%$ | 20 | 3 | 79 |
| New Jersey. | 87 | 0 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| West Virginia | 19 | 24 | 43 | 15 | 36 |  | 1 | 25 |
| North Carolina -.---.- | 121 | 107 | 223 | 209 | 100 | 32 | 0 | 177 |
| South Carolina ------- | 29 | 18 | $4{ }^{4}$ | 47 | 43 | 0 | 5 | 47 |
| Georgia -------------- | 53 | 42 | 95 |  | 53 |  | 4 | 49 |
| South Central Division: |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Tennessee. | 57 | 113 | 170 | $13 \%$ | 115 | 0 | 3 | 130 |
| Alabama - | 50 | - 37 | 87 | 84 | 30 |  |  | 7 |
| Mississippi | 27 | 13 | 43 | 11 | 30 |  |  | 30 |
| Louisiana | 20 | 18 | 38 | 16 | 29 | 15 |  | 26 |
| Texas...-- | 103 | 117 | 220 | 96 | 90 | 18 | 16 | 65 |
| Arkansas.- | 100 | 108 | 203 | 155 | 60 | 34 | 4 | 125 |
| Oklahoma --..-.------- |  |  |  |  |  |  |  |  |
| Indian Jerritory .-..-- | 3 | 4 | 7 | 6 | 6 | 4 | 0 | 7 |
| North Central Division: |  |  |  |  |  |  |  |  |
| Indiana--...... | 71 | 140 | 143 | 111 | $12{ }_{7}$ | 0 | 7 | 301 |
| Illinois. | 149 | 119 | 268 | 119 | 119 | 39 | 16 | 137 |
| Michigan | 62 | 5.2 | 114 | 28 | 76 |  | 4 |  |
| Wisconsin. | 61 | 55 | 117 | 67 | 70 | 11 | 9 | 19 |
| Minnesota. | 56 | 34 | 90 | 60 | 50 | 22 | 3 |  |
| Iowa..-- | 103 | 87 | 190 | \% ${ }^{1}$ | 105 | 26 | 9 | 125 |
| Missouri- | 53 | 68 | 120 | 11 | 67 | 30 | 6 | 78 |
| North Dakota. |  |  |  |  |  |  |  |  |
| South Dakota | 48 |  | 87 | 50 | 77 | 27 | 8 | 0 |
| Kansas --. | 43 | 54 | 102 | 102 | 60 | 0 | 12 | 70 |
| Westorn Division:------- |  |  |  |  |  |  |  |  |
| Montana | 4 | 3 | 7 | 0 | 4 |  |  |  |
| Colorado ---------.-.- |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Idaho --- |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Washington | 10 |  |  |  | ${ }^{\prime}$ | 0 | 0 | 8 |
| Oregon-... | $\frac{14}{33}$ | 13 |  | ${ }^{20} 6$ | 21 | 0 | 0 | 20 |
| Caliorni |  |  |  |  |  |  |  |  |

Table 3.-Summary of statistics of schools for the blind, 1899-1900.

Table 4．—Statistics of State institutions for the education of the blind，1899－1900．

|  | Post－office． | Name． | Executive officer． | Instructors． |  |  |  |  | Pupils． |  |  |  |  |  |  |  |  |  |  |  | Expendi－ tures． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { 品 } \\ & \stackrel{y y y y y}{c} \end{aligned}$ | $\begin{gathered} \dot{9} \\ \dot{\tilde{y}} \\ \dot{9} \\ = \end{gathered}$ |  |  |  | $\underset{\sim}{\underset{\sim}{5}}$ |  | $\frac{\text { 玉í }}{\substack{0}}$ | $\begin{aligned} & \text { 苞 } \\ & \text { 品 } \\ & \text { 皆 } \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |
|  | 1 | ＇2 | ： | 4 | 5 | 4 | \％ | 0 | 9 | 10 | 11 | 12 | 1：8 | 县4 | 1.7 | 10 | 17 | 16 | 19 | 20 | 91 | 22.8 |
| 1 | Talladega，Ala | Alabama Academy for the | J．H．Johnson | 6 |  | 13 | 3 | 3 | 50 | 37 | 87 | $8 \%$ | 30 | 0 | 0 | 77 | 1，62； | S237 | $\$ 800$ |  |  | \＄20，619 |
| 2 | Little Rock，Ark | Arkansas School for the Blind＊ | Jno．H．Dye |  |  | 14 | 3 |  | 109 | 108 | ：08 | 15．） | 60 | 36 |  | 125 | 600 | 14：2 | 3,000 | 5100，000 | 811，850 | 21，500 |
| 3 | Berkeley，Cal．．．． | California Institution for the Deat and the Blind． | Warring Wilkin－ |  |  |  |  | 0 |  |  | 59 |  | 47 | $1)$ |  |  | 2，700 | 263 |  | 55：5，000 |  | 57，169 |
| 4 | Colorado Springs， Colo． | Colorado Institution for the Deaf and the Blind． | son． |  |  |  | 3 | 2 | 23 | 21 |  |  |  |  |  |  | 750 | 250 |  | 2：33，000 |  | 13，145 |
| 5 | St．Augustine，Fla． | State Institute for the Blind | Frederick Pasco． |  |  |  |  |  |  |  |  |  |  |  |  |  | 120 | 166 | 400 | 25,000 |  | 10，000 |
| 6 | Macon，Ga | Georgia Academy for the | Dudley Williams．－ | 3 |  | 10 |  |  |  |  |  |  | 53 |  |  |  | 2，900 | 175 | 1，250 | 110， 000 | 1，000 | 17，000 |
| 7 | Jacksonville，Ill | Illinois Institution for the | Frank H．Hall |  |  | 20 | 7 | 3 | 119 | 119 |  | 119 | 119 | 39 | 16 | $13{ }^{\circ}$ | 8，000 | $: 04$ | 851 | 233， 106 | 10， 430 | 49，685 |
| 8 | Indianapolis，Ind | Indiana Institution for the | Geo．S．Wilson | 5 |  | 14 | 3 | 4 | 71 | \％ 0 |  | 111 | it |  | 7 | 13.2 | 1，800 | 200 | 3，000 | 545，598 | 1，497 | 29，236 |
| 9 | Fort Gibson，Ind．T | International School for the Blind． | Laura A．Rowland． | 1 |  |  | 1. | 2 | 3 | 4 |  |  | 6 | 4 |  |  | ：2010 | 100 | 150 |  |  |  |
| 10 | Vinton，Iowa－．－．． | Iowa College for the Blind．．．． | T．F．McCune－－．．．． |  |  | 11 | 3 |  | 103 | 87 | 190 | 71 | 105 | 23 |  | 125 | 4，305 |  | 3，010 | 150，000 |  | 29， 981 |
| 11 | Kansas City，Kans． | Kansas Institution for the Education of the Blind． | Lapier Williams．． | 4 |  |  |  |  |  |  |  | 10：2 | 66 | ， | $1: 2$ | \％1） | 2， 60 |  | 3，500 | 118，350 |  | 20，233 |
| 12 | Louisville，Ky | Kentucky Institution for the Education of the Blind． | Benj．B．Huntoon．．． |  |  |  | 3 | 2 |  |  |  |  |  | 27 |  |  |  | 292 | 2.000 | 150，000 |  | 27，578 |
| 13 | Baton Rouge，La ．． | Louisiana State Institution for the Education of the Blind． | Alvan E．Read |  |  |  |  | 4 | 20 |  |  |  | 29 | 16 |  |  | 778 |  |  | 40，000 |  | 10，000 |
| 14 | Baltimore，Md．．．．． | Maryland School for the Blind－ | Frederick D．Mor－ rison． |  |  | 12 | 3 | 3 | 52 | 45 10 |  | $\begin{aligned} & 50 \\ & 32 \end{aligned}$ | $\begin{aligned} & 54 \\ & 21 \end{aligned}$ | 12 5 |  | $\begin{aligned} & 65 \\ & 32 \end{aligned}$ | 2，458 | 275 | 6，390 | 397， 000 | 35，000 | 24,725 10,659 |



Table j.-Summary of statistics of Siate institutions for the deaf, 1899-1900.

| State or Territory. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { institu- } \\ & \text { tions. } \end{aligned}$ | Instructors. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Total. | Articulation. | Auricular perception. | Industrial department. |
| 1 | 2 | : ${ }^{\text {P }}$ | 1 | 5 | 6 | 7 | 8 |
| United States <br> North Atlantic Division South Atlantic Division South Central Division. North Central Division... Western Division .......... | 56 | 344 | 668 | 1,01\% | 403 | 90 | 267 |
|  | 18 | 83 | 307 | 390 | 246 | 63 | 102 |
|  | 10 | 64 | 70 | 134 | 45 | 8 | 42 |
|  | 9 | 50 | 68 | 118 | 31 | 1 | 27 |
|  | 12 | 121 | 195 | 316 | 71 | 18 | 75 |
|  | 7 | 26 | 28 | 54 | 10 | 0 | 21 |
| North Atlantic Division: Maine New Hampshire | 1 | 1 | 12 | 13 | 8 |  | 5 |
| Vermont................ Tassachusetts |  | 1 | 27 | 28 | 2 | 22 | 6 |
| Rhode Island. | 1 | 2 | 11 | 13 | 8 | , | 3 |
| Connecticut. | 2 | 9 | 21 | 30 | 11 | ${ }^{6}$ | 5 |
| New York .. |  | 39 | 143 | 182 | 112 | 35 | 53 |
| New Jersey. | $\frac{1}{4}$ | ${ }_{5}^{5}$ | $\stackrel{12}{12}$ | 17 | 8 7 7 |  | 6 24 24 |
| South Atlantic Division: Delaware $\qquad$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Mar yland - | 2 | 10 | 12 | \% | 6 | 2 | 10 |
| District of Columbia | 1 | 19 | 11 | 30 | 16 | 6 | 3 |
| Virginia --.... | 1 | ${ }_{9}^{9}$ | 8 | 10 | $\stackrel{2}{6}$ | 0 0 | 7 |
| North Carolina. | $\stackrel{1}{2}$ | ${ }_{9}$ | 17 | 20 | 10 | 0 |  |
| South Carolina | 1 | 6 | \% | 13 | 5 |  |  |
| Georgia ....... | 1 | 3 | 6 | 9 | 3 | 0 | 0 |
|  |  |  |  |  |  |  |  |
| Kentucky .-........... | 1 | 15 | $1 \%$ | 32 | 9 | 0 | 6 |
| Tennessee. | 1 | 4 | 7 | 11 | 3 |  | 3 |
| Alabama | 1 |  | 5 | 10 | 3 | 1 | 2 |
| Louisiana. | 1 | 3 | 5 | 8 | 3 | 0 | 2 |
| Texas.... | 2 | 14 | 17 | 31 | 10 |  | 5 |
| Arkansas | 1 | 9 | 14 | 2 | 3 | 0 | 7 |
| Oklahoma .-.... | 1 | 0 | 3 | 3 |  |  |  |
| North Central Division: |  |  |  |  |  |  |  |
| Ohio ......-......... | 1 | 10 | 30 | 40 | 15 | 1 | 8 |
| Indiana | 1 | 15 | 15 | 30 | 3 | 5 | 5 |
| Illinois ... | 1 | 19 | 32 | 51 |  | 1 | 8 |
| Michigan -.. | 1 | $1{ }^{12}$ | 29 | ${ }_{21} 1$ | 13 | 1 | 6 |
| Wisconsin | 1 | 13 10 | 11 16 | 24 | 10 6 | 0 | ${ }_{6}^{6}$ |
| Iowa.... | 1 | 12 | 13 | \% | 5 | 0 | 6 |
| Missouri | 1 | 10 | 17 | $2 \pi$ | 7 | 0 | 10 |
| North Dakota | , | 3 | 5 | 8 | 2 | 0 | 2 |
| South Dakota | 1 | $\stackrel{\square}{9}$ | $\stackrel{9}{2}$ | 4 |  |  |  |
| Nebraska.......... | 1 | 9 6 | 12 | 21 | $\stackrel{8}{2}$ | \% | $\stackrel{9}{8}$ |
| Western Division: |  |  |  |  |  |  |  |
| Montana....... | 1 | 2 | 0 | 2 |  |  | 2 |
| W yoming... | - .-.- ${ }^{\text {a }}$ | 2 | 7 | 9 | 5 | 0 | 7 |
|  | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| New Mexico....----.....-.......... |  |  |  |  |  |  |  |
| Utah ---.....-.......... |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Washington Oregon | 1 | $\stackrel{4}{2}$ | 5 4 | $\stackrel{9}{6}$ | $\stackrel{1}{2}$ | 0 | $\stackrel{3}{1}$ |
| California | 1 | 9 | 6 | 15 | 2 | 0 | 2 |

Table 6.-Summary of statistics of State institutions for the deaf, 1S99-1900.


Table 7.-SSmmary of statistics of State institutions for the deaf, 1899-1900.

|  | Volumes in library. | Value of scientific apparatus. | Value of grounds and buildings. | Expencitures. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Grounds } \\ & \text { and } \\ & \text { buildings. } \end{aligned}$ | For salaries and other expenses. |
| 1 | 2 | 3 | 4 | 5 | 6 |
| United States. | 90,698 | 21,080 | $12,115,856$ | 496, \%09 | 1, 863, 126 |
| North Atlantic Division | 36,040 | 9,350 | 4, (2)7, 704 | 174,580 | 687, 752 |
| South Atlantic Division | 9,735 | 6,170 | 1,701,000 | 28,096 | 173, 977 |
| South Central Division | 5,957 | 1,100 | 1,393,500 | 57,986 | 241,575 |
| North Central Division | 34, 220 | 3,850 | 3, 921,090 | 227, 0:26 | 662,994 |
| Western Division | 4,230 | 700 | 1,042,56? | 9,021 | 90, 828 |
| North Atlantic Division: |  |  |  |  |  |
| Naine -.............. | 600 |  | 30,000 |  | 15,000 |
| Vermont.-....- |  |  |  |  |  |
| Massachusetts |  |  | 170,000 | 500 |  |
| Phode Island | 175 |  | 76,000 | 1,000 |  |
| Comnecticut | 2,8\%0 |  | 308, 000 | c0, 000 | 6,692 |
| New York. | 20,241 | 7, 550 | 2, 007, 177 | 60, 056 | 410,645 |
| New dersey | $\stackrel{2}{2,400}$ | 500 1,100 | 1, 150, 215008 | 2, 51,000 51,024 | 41,000 214,415 |
|  |  |  |  |  |  |
| Maryland | 385 | 789 | 290,060 | 1,596 | 35, 277 |
| District of Columbia | 4.500 | 5,000 | 704,000 | 1,500 | 72, 500 |
| Virginia | 600 | 40 | 150,000 |  |  |
| West Virginia | 500 |  | 140, 010 | 20,000 | 37̆,500 |
| North Carolina | 2,350 | 250 | 260, 000 | 5,000 | 18,200 |
| Georgia --. - | 1,20) |  | ${ }^{615}, 0000$ |  |  |
| Florida | 1.200 |  | 25,000 |  | 10,500 |
| South Central Division: |  |  |  |  |  |
| Kentucky-........... | 2.:000 | 1,060 | 143, 500 | -950 | 58,387 |
| Alabama. |  |  | 100, 000 |  |  |
| Mississippi | 1,108 |  | 75,000 |  | 20,555 |
| Louisiana. | 300 |  | 350,000 |  |  |
| Texas .-. | 859 | 100 | 375, 000 | 48,471 | 77,189 |
| Arkansas | 500 |  | 175,000 | 3,365 | 36,319 |
| Oklahoma Indian Teritory |  |  |  |  | 15,125 |
| North Central Division: |  |  |  |  |  |
| Ohio -... | 3.090 |  | \%50,000 | 90, 000 | 91,500 |
| Indiana | 3,363 |  | 535, 685 | 3,992 | 65, 118 |
| Illinois.. | 12.000 |  | 500, 000 | 5,463 | 109,217 |
| Michigan | 4,178 | 500 | 494, 405 | 62,421 | 83,363 |
| Wisconsin | 2, 400 |  | 120,000 | 3,000 | 39,800 |
| Iowa | 2,055 | 810 2,000 | 276, 40000000 | 5,000 | 43,000 50,000 |
| Missouri | 2,500 |  | 315, 060 | 1,918 | 68,000 |
| North Dakota | 400 | 100 | 45, (000 | 19,882 | 14,356 |
| South Dakota | 230 | 50 | 60,000 | 4,500 | 12.250 |
| Nebraska | 2,400 | 100 | 2(1), 000 | 28,350 | 41,650 |
| Westeru Division: |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Wyoming |  |  |  |  |  |
| Colorado- | 650 |  | 233,000 |  |  |
| New Mexico | 250 |  | 5,000 |  |  |
| Arizona | \%0 | 200 | 207, 0:0 | 7,021 | 28,893 |
| Nevada |  |  |  |  |  |
| Idaho |  |  |  |  |  |
| Washington |  |  | 28,000 | 2,000 | 10,767 |
| California | 2,200 | 500 | 525, 000 |  | 57, 168 |

TABLE 8．－Summary of statistics of public and private day schools for the deaf， 1899－1900．

PUBLIC DAY SCHOOLS．

| States． |  | Instructors． |  |  |  |  |  | Pupils． |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { 寻 } \\ & \text { 岂 } \end{aligned}$ |  | $\begin{aligned} & \text { त⿹丁口⿹丁口㇒ } \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & \text { di } \\ & \text { 号 } \end{aligned}$ |  |  |  |  |  |  |
| I | 12 | \＄3 | 4 | 8 | 6 | 7 | 8 | 9 | 13 | 足县 | 13 | 13 | $1{ }^{1}$ | 15 | 16 | 显 8 |
| Total | 41 | 5 | 94 | 99 | 83 | 29 | 28 | 409 | 30 | 749 | 124 | 609 | 12 | 43 | 3 | \＄57， 714 |
| California | 1 | ， | 2 |  |  |  |  | 10 | 5 | 15 | 0 | 15 |  |  |  |  |
| Illinois． | 13 | 2 | 21 | 23 | 21 | 14 | 15 | 123 | 75 | 198 | 58 | 140 |  |  |  |  |
| Indiana－．．．．－． | 1 | 0 | 13 | 18 | 18 | 0 | 3 | 65 | 6 | 133 | 18 | 138 |  |  |  |  |
| Michigan．．．．．．． | 4 | 0 | 7 | 7 | 7 | 3 | 1 | 23 | 25 | 48 | 0 | 48 | 1 | 7 | 0 | 1，550 |
| Missouri | 1 | 1 | 4 | 5 | 1 | 0 | ， | 29 | 14 | 43 | 43 |  |  | 0 | 1 | 3，1\％0 |
| Ohio ．－． | 5 | 0 | 16 | 16 | 13 |  | $\underset{\sim}{2}$ | 67 | 53 | 120 | 10 | 102 | 10 | 21 | 1 | 13．6：in |
| Wisconsin． | 15 | 2 | 31 | 33 | 28 | 4 | $\tau$ | 85 | $9 \pm$ | 179 | 0 | 1.1 | 1 | 15 | 1 | 15， 791 |

PRIVATE DAY SCHOOLS．




Table 9．－Statistics of State public institutions for the deaf，1899－1900－Continued．

|  | Post－office． | Name． | Executive officer． | Instructors． |  |  |  |  |  | Pupils． |  |  |  |  |  |  |  |  |  |  | pur spunouting oo ou[飞्® | Expendi－ tures． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \dot{8} \\ & \frac{3}{3} \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & \dot{8} \\ & \stackrel{3}{3} \\ & \stackrel{y}{*} \end{aligned}$ |  | $\begin{aligned} & \text { gij } \\ & \text { ⿺辶 } \\ & \text { E } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | S | 0 | 10 | 11 | 12 | 13 | 14 | 1.5 | 16 | 17 | 18 | 19 | 20 | $\because 1$ | 2 | 23 |
| 38 39 | Raleigh，N．C ．．．．．． Devils Lake，N． | North Carolina Institution for the Deaf，Dumb，and the Blind． | John E．Ray ，A．Mi |  |  |  |  | 0 0 |  | 48 |  |  | 79 | 1：3 |  | ${ }_{0}^{0}$ | 0 | 950 400 | 9200 | 9250 | 3\％\％，000 | （a） | 1\＄18，210 |
| 39 40 | Devils Lake，N． Dak． <br> Columbus，Obio | Deaf and Dumb Asylum of North Dakota． <br> Ohio Institation for the Ed－ | Dwight F．Bangs ．． <br> J．W．Jones | 3 10 |  |  | 15 | ${ }_{1}^{0}$ |  | ： 20 | 30 253 | 568 | 49 10 |  |  | 0 30 |  | 3，${ }^{400}$ | 256 201 | 100 | 45,000 750,000 | $\$ 19,882$ 00,000 | $14,3.5$ 91,500 |
| 40 |  | Ohio Institntion for the Ed－ ncation of the Deaf and Dumb． | J．W．Jones－－－－－．． |  |  |  | 15 | 1 |  |  |  | $50 \%$ | 10 | 20.2 | 30 | 30 |  |  | 201 |  | 750，000 | 20，000 | 91，500 |
| 41 | Guthrie，Okla．．．．．． | Oklahoma Institute for the Deaf． | H．C．Beamer |  |  |  |  |  |  | 27 | 28 |  |  |  |  |  |  |  | 2\％／5 |  |  |  | 15， 125 |
| 42 | Salem，Oreg | Oregon School for Deaf－ Mutes． | Clayton Wentz |  |  |  |  |  | 1 | $3 i$ | 35 | 72 | 59 |  |  | $(1)$ |  | 260 | 200 |  | 28， 000 | 2,000 | 10， 267 |
| 43 | Edgewood Park， Pa． | Western Pennsylvauia In－ stitution for the Deaf and Dumb． | Wm．N．Burt－．．．．．． |  |  | 21 |  |  | 5 | 93 | 95 | 188 | 96 | 9 |  |  | 4 | 3，号4 | 210 | 100 | 150， 987 | 47，024 | 39，205 |
| 44 | Philadelphia，Pa | Home for the Training in Speech of Deaf Children before they are of School Age． | Mary S．Garrett | 1 |  |  | ${ }^{6}$ |  | 2 | 41 | 31 | 2： |  | \％ |  |  |  | 350 | 301 | －－．．． | 60，000 | 1，000 | 20，239 |
| 45 | Mount Airy，Phil－ adelphia．Pa． | Pennsylvania Institution for the Deaf and Dnmb． | A．L．E．Crouter |  |  |  |  |  |  |  | 240 | 500 |  |  |  |  |  |  | $2 \%$ | 1，000 | 1，000，000 | 3，000 | 134，500 |
| 46 | Scranton，Pa－．．．．．． | Pennsylvania Oral School for the Deaf． | Mary B．C．Brown |  |  |  |  |  |  |  | 50 | 80 |  | 80 |  |  |  | 150 | 255 |  | 105， 000 | ${ }^{0}$ | 20，471 |
| 47 | Providence，R．I ．．． | Rhode Island Institute for the Deaf． | Laura De L．Rich－ ards． |  |  |  |  |  |  |  | 25 |  |  | 64 |  |  |  | 1\％ |  |  | 76，000 | 1，000 |  |
| 48 | Cedar Springs，S．C | South Carolina Institution for the Education of the Deat and the Blind． | N．F．Walker．－．．．．－ |  |  |  |  |  |  | 63 | 51 |  |  | 35 |  |  |  |  | 150 |  | 61，000 |  |  |
| 49 | Sioux Falls，S．Dak． | South Dakota School for Deaf－Mutes． | James Simpson．．－－ |  |  | 4 |  |  |  | $2 \pi$ | 23 | 50 | 50 |  |  |  |  | 230 |  | 50 | 60， 000 | 4，500 | 12，250 |

Table 10.-Statistics of public day sehools for the deaf, 1890-1900.


Table 11.-Statistics of private day schools for the deaf, 1899-1900.


Table 12．－summary of statistics of public and private schools for the fecble－ minded，1899－1900．

| States． | $\begin{aligned} & \text { Number of institu- } \\ & \text { tions. } \end{aligned}$ | Instructors， |  |  |  |  | Pupils． |  |  |  |  | Value of grounds and buildings． | Expenditures． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \dot{9} \\ & \text { 彩 } \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & \text { तె่ } \\ & \text { 犬 } \\ & \text { E- } \end{aligned}$ | Kindergarten. |  |  | $\begin{gathered} \text { Build- } \\ \text { ingsand } \\ \text { im- } \\ \text { prove- } \\ \text { ments. } \end{gathered}$ | For sala－ ries and other ex－ penses． |
| 貣 | 8 | \％ | 星 | 3 | 4 | 9 | 8 | 9 | ［ 3 | 18 | H2 | 1.3 | 18 | 18 |
| Total | 19 | 53 | 195 | 248 | 171 | $70 \%$ | 5，148 | 4， 644 | 9，792 | 932 | 1，993 | \＄5，608， 198 | \＄284，66\％ | \＄1，400，783 |
| Massachusetts | 1 | 6 | 9 | 15 | 6 | 94 | 399 | 278 | $67 \%$ | 168 | 91 | 363， 600 | 9，80\％ | 91， 743 |
| New York．． | 3 | 1 | 16 | 17 | 21 | 75 | 543 | 848 | 1，391 | 133 | 305 | 639， 053 | 36， 305 | 135， 181 |
| New Jersey | 2 | 6 | 25 | 31 | 20 | 32 | 173 | 195 | 368 | 86 | 234 | 390， 090 | 32.880 | 47，6\％\％ |
| Pennsylvania | 1 | 3 | 25 | 28 | 11 | 143 | 595 | 889 | 984 | 65 | 117 | 575， 000 | 13， 109 | 174，831 |
| Kentucky | 1 | 0 | 4 | 4 | 2 | 10 | 89 | 57 | －146 | 0 | 0 | 100， 000 |  | 30， 0010 |
| Ohio | 1 | 2 | 28 | 30 | 16 | 43 | 696 | 441 | 1，137 | 0 | ${ }^{27 \%}$ | 863， 680 | 10，743 | 156，485 |
| Indiana | 1 | 14 | 13 | 27 | 18 | 33 | 339 | 342 | 681 | 0 | 338 | 350， 000 | 27， 500 | 96，500 |
| Illinois | 1 | 3 | 13 | 16 | 5 | 41 | 450 | 409 | 850 | 150 | 35 | 500， 000 | 3，500 | 108，000 |
| Michigan | 1 | 0 | 4 | 4 |  | 20 | 111 | 198 | 309 | 28 | 22 | 144， 300 | 36， 150 | 50， 314 |
| Minnesota | 1 | 2 | 13 | 15 | 6 | 43 | 424 | $37 \%$ | 801 | 58 | 167 | 476， 914 | 32,055 | 108， 066 |
| Iowa． | 1 | ， | 18 | 25 | 11 | 41 | 559 | 430 | 989 | 70 | 130 | 309，915 |  | 133，515 |
| Nebraska | 1 | 2 | 6 | 8 | 2 | 8 | 111 | 127 | 238 | 10 | 170 | 250，000 | 50，500 | 70， 350 |
| Kansas | 1 | 0 | 2 | 2 | 0 | 14 | 129 | 75 | 204 | 29 | 0 | 135， 000 | 25，000 | 32， 000 |
| Washington | 1 | 1. | 3 | 4 | 2 | 5 | 35 | 23 | 58 | 15 | 23 | 3，000 |  |  |
| California ．．．．．． | 1 | 2 | 8 | 10 | 45 | 31 | 293 | 251 | 544 | 77 | 21 | 444， 823 |  | 99，500 |
| Wisconsin | 1 | 4 | 8 |  | 6 | 69 | 202 | 213 | 415 | 43 | 67 | 152， 613 | 7,150 | －66，626 |

PRIVATE INSTITUTIONS．

| Total | 10 | 13 | 43 | 56 | 37 | $62^{1}$ | 259 | 166 | 425 | 171 | $15:$ | \＄197， 000 | \＄5，500 | \＄35， 500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Connecticut | 1 | 0 |  | ， |  | 16 | 137 | 75 | 212 | 78 | 72 | 125， 000 |  |  |
| Illinois． | 1 | 0 | 2 | 2 | 1. | 6 | 9 | 6 | 15 | 6 | 2 | 12， 000 | 2，000 | 3，000 |
| Maryland | 1 | 1 | 2 | 3 | 2 | 4 | 20 | 6 | 26 | 10 | 15 |  |  |  |
| Massachusetts－ | 3 | 6 | 9 | 15 | 22 | 18 | 48 | 20 | 68 | 16 | 12 |  |  |  |
| Michigan | 1 | 3 | 4 | 7 | 5 | 0 | 20 | 15. | 35 | 35 | 35 | 25，000 |  | 10，000 |
| New Jersey ．．．． | 3 | 3 | 22 | 25 | 7 | 18 | 25 | 44 | 69 | 25 | 18 | $3 \overline{5}, 000$ | 3，500 | 2：， 500 |

TABLE 13．－Statistics of State institutions for the feeble－minded，1890－1900．

|  | Post－office． | Name． | Executive officer． | Instructors． |  |  |  |  | Pupils． |  |  |  |  |  |  |  | Expenditures． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\underset{\sim}{\text { }}$ |  |  |  |  | 离 |  | $\begin{gathered} \text { ت゙ֶ } \\ \stackrel{y y}{6} \end{gathered}$ |  | $\begin{aligned} & \text { 苞 } \\ & \underset{y y}{y} \end{aligned}$ | －第 |  |  |  |  |
|  | 1 | 2 | 3 | $\ell$ | 3 | 6i | 9 | 9 | 9 | 10 | \｜ | 12 | 103 | 4 | 1.5 | 118 | R | 10 |
| 1 | Eldridge，Cal | California Home for the Care and Training of Feeble－Minded Children． | A．E．Osborne，M．J | ： | 8 | 11） | 4．） | 31 | 293 | 吕 1 | SH | 7 | ： 2 |  |  | 8444．823 |  | 899，500 |
| 2 | Lincoln， 111 | Illinois Asylum for Feeble Minded Children．＂ | Dr．W．L．Athon | 3 | 13 | 16 | \％ | 41 | 450 | 410 | 805） | 150 | 33 | 506 | 500 | 500，000 | 83，500 | 108，000 |
| 3 | Fort Wayne，Ind | Indiana School for Feeble． | Alexander Johnson． | 14 | 13 | ： | 18 | 33 | 339 | 343 | （6） 1 | 0 | 338 | 400 | 560 | 350，000 | 27，500 | 9\％， 500 |
| 4 | Glenwood，Iowa | Iowa Institution for Feeble－ Minded Children． | F．M．Powell，M．D | $\%$ | 18 | 2．） | 11 | 41 | 599 | ＋3i） | 989 | \％） | 130 | 1．06i6 | 1，060 | 309，915 |  | 133，515 |
| 5 | Winfield，Kans | Kansas State Asylum for Idiotic and Imbecile Youth． | C．S．Newlon，M．D | 0 | ： | 2 | $0)$ | 14 | 129 | \％ | 204 | 2.9 | $1)$ | 100 | 1，000 | 135，060 | 25，000 | 32， 000 |
| 6 | Frankfort，Ky | Institution for the Training and Education of Feelle－Minded Children． | C．K．Wallace，M．D | 0 | 4 | 4 | $\because$ | 10 | 88 | S7 | 146 | 1 | 0 |  |  | 100．0100 |  | 30，000 |
| $\%$ | Waverly，Mass | Massachusetts School for the Feeble－Minded． | Walter E．Ternald， M．D． | 6 | 9 | 1．） | ${ }_{6}$ | 94 | 399 | 278 | $67 \%$ | 168 | 91 | 9.00 | 860 | 363，609 | 9，807 | 91， 743 |
| 8 | Lapeer，Micl | Michigan Home for the Feeble－ | W．A．Polglase，M．D． | 0 | $t$ | 4 |  | 20 | 111 | 198 | 309 | 28 | ：\％ | 110 | 200 | 144，6i0） | 36， 150 | 50，314 |
| 9 | Faribault，Minn | Minnesota School for Feeble－ Minded． | Arthar C．Rogers， M． 1. | $:$ | 13 | 15 | 6 | 43 | 4.24 | 37 | 801 | 58 | 167 | 350 | ：3，418 | 476，914 | 32，055 | 108，066 |
| 10 | Beatrice，Nebr | Nebraska Institution for Feeble－ <br> Minded Youth | Benj．F．Lang．M．D．． | 2 | 6 | ＊ | ： | 8 | 111 | 1：\％ | 238 | 10 | 170 | 250 | 510 | ： 20,000 | 50，500 | \％ 0,350 |
| 11 | Vineland，N．J | The New Jersey Training School for Feeble－Minded Children． | Prof．E．R．John－ stone． | 6 | 13 | 19 | 10 | 3； | 173） | 85 | ： 29 | 68 | $17 \%$ | （5） | 1，200 | 2\％0，000 | 3：， 880 | 4\％，6\％： |
| 12 | －－－．do－－－－－－－ | New Jersey Siate Institution for Feeble－Minded Women． | $\begin{aligned} & \text { Marye. J. Dunlap, } \\ & \text { Mi.D. } \end{aligned}$ | $1)$ | 1： | 12 | 10 |  | 0 | 109 | 109 | 18 | 5 | 50 | 1，000 | 50,000 |  |  |
| 13 | Newark，N．Y | New York State Custodial Asy－ lum for Feeble－Minded Women | C．W．Winspear．．．．． |  | 1 | 1 | 3 | 28 | 0） | 4.46 | 446 | 40 | 26 | 220 | 443 | $\because 15,475$ | 35，2\％6 | 47，220 |
| 14 | Randalls Island，N．Y． | Ravdalls Island Asylums and | Mary C．Dunphy ．．．． | 0 | 3 | 3 | 8 | 9 | 235 | 117 | 35.2 | 32 | 241 | 0 | 500 |  |  |  |
| 15 | Syracuse，N．Y | Syracuse State Institution for Feeble－Minded Children． | James C．Carson． M．D． | 1 | 1：2 | 13 | 10 | 38 | 308 | 28\％ | 593 | 61 | 38 |  |  | 4233，578 | 1，0：9 | 87，961 |


Table 14．－Statistics of private schools for the feeble－minden，1890－1900．

|  | Post－office． | Name． | Sxerutive officer． | Instructor＇s． |  |  |  |  | Pupils． |  |  |  |  |  |  | 药 | Expendi－ tures． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 岕 | 先 | $\begin{aligned} & \text { تं } \\ & \text { ※ } \\ & \text { E } \end{aligned}$ |  |  | $\stackrel{\text { " }}{\text { 悹 }}$ |  | $\begin{aligned} & \text { Fig } \\ & \text { O } \\ & \text { E } \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & 3 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \tilde{0} \\ & \vdots \\ & 0 \\ & 0 \end{aligned}$ |
|  | 1 | 9 | ； | $\triangle$ | 5 | 63 | 7 | ＊ | $\bigcirc$ | 40 | $4 \square$ | 1\％ | 13： | 14.4 |  | A－5 | 16 | 18 | 13 |
| 1 | Lakeville，Conn | Connecticut School for Imbeciles | Geo．W．Knight，M．D． |  | 4 | 4 |  | 16 | 13\％ | 75 | ：11： | \％ 8 | $\because$ |  |  | 5125， 000 |  |  |
| $\because$ | Godfrey，ill ． | Beverly Farm Home and School for Nervous and Backward Children． | Wm．H．C．Smith，M．D－ | 0 | $\because$ | $\because$ | 1 | （i） | ！ | 6 | 15 | ${ }_{6}$ | $\because$ | 500 | \＄300 | 12,000 | Se， 000 | 33，010 |
| ； | Ellicott City，Md．．－－ | The Font Hill Private Institution for the Feeble－Minded． | Samuel J．Fort，M．D | 1 | $:$ | 3 | 2 | 4 | 20 | 6 | ： 2 | 10 | 15 |  |  |  |  |  |
| 4 | Amherst，Mass．．．．－－ | Home School for Backward Children and Youth． | Mrs．W．D．Herrick ．－．－ | $\because$ | $\because$ | 4 | 1 | 3 | （； | 4 | 10 |  |  |  |  |  |  |  |
| 5 | Barre，Mass ．－－－－－－－ | Elm Hill Private Institution for the Education of Feeble－Minded Youth． | Geo．A．Brown，M．D．， Catherine W．Brown． | 4 | 5 | 9 | $1 \%$ | 15 | 40 | 13 | 5：3 | 1： | 10 | －－－－ |  |  |  |  |
| 6 | Fayville，Mass ．－．．－－ | Emmanuel School，Hillside．．．．．．．．．．．． | M．A．F．D．Green－－．．．． | ${ }_{0}$ | 3 | $\because$ | 4 |  | $\stackrel{\square}{2}$ | 3 | 5 | 4 | $\underset{\sim}{2}$ | 400 |  |  |  |  |
| 7 | Kalamazoo，Mich ．－． | Wilbur Home and School for the Feeble－Minded． | Charles T．Wilbur， M．D． | 3 | 4 | $\stackrel{ }{ }$ | 5 | 0 | 8 | 15 | ． 3.$)$ | （35） | 35 |  |  | \％5，000 |  | 10，000 |
| 8 | Cranberry，N．J．．．．． | The Garrison Educational Home for Feeble－Minded． | Rev．C．F．Garrison ．．．． | \％ | $\cdots$ | 8 | 5 | $\stackrel{\square}{2}$ | ${ }_{4}^{4}$ | 8 | $1:$ | 8 $\sim$ | $\stackrel{\sim}{\sim}$ | \％00 | 2\％ | 5，000 | 500 | 1.500 |
| 9 10 | Haddontield，N：J ．－． Orange， $\mathrm{N} . \mathrm{J} .-. .-$ | Haddonfield Training School－－．－．－． | Margaret Bancroft $\ldots$ | 1 | ${ }^{7}$ | 88880 | 0 | 11 | 10 | 20 | 39 | \％ | 10 | 1，000 | 5，000 | 30,000 | 3,000 | ：21，000 |
| 10 | Orange，N．J． | Seguin Physiological School for the Training of Children of Arrested Mental Development． | Mrs．Elsie M．Seguin ．－ | 0 | 10 | 10 | 0 | \％ | 11 | 16 | $\because{ }^{\prime \prime}$ | 11 | ${ }^{6}$ |  |  |  |  |  |

## CHAPTER XLT.

## STATISTICS OF PUBIIC KINDERGARTENS.

There were 250 cities in the United States of over 4,000 population in 1899-1900 in which public kindergartens were maintained in connection with the city systems of public schools. The table on the next page summarizes the statistics of the public kindergartens. There was an increase of 37 in the numker of cities supporting public kindergartens over the preceding year. The actual number of kindergartens reported was 1,815 , an increase of 273 . The number of teachers employed was 3,326, an increase of 49\%. The number of pupils in the Findergartens was 131,65i, an increase of $21 . \tilde{63}$ over the year 1898-99. The information in Table 2 was furnished this Office by the city superintendents of public instruction. The table shows the number of public kindergartens in each city, the number of teachers, and the number of pupils by sex.

For the year 1897-98 this Office attempted to collect statistics of public and private kindergartens, kindergarten associations, and kindergarten fraining schools. The result was printed in Chapter LIII of the Education Report for 1897-98, pages 253, to 2579. The Offcョ, by much correspondence, procured the names of 2,998 private kindergartens known to have been in operation in 1897-88. After repeated requests for information, 1,519 private kindergartens revorted statistics to this Ofilce. Detailed information from the 1,459 other private kindergartens reported as still in existence could not be obtained. The 1,519 kindergartens reporting had 3,232 teachers and $4 \pi, 853$ pupils. Allowing proportionate numbers of teachers and pupils, it may ke estimated that the 1,4 99 kindergartens not giving' statistics had 3,173 teachers and 45,884 pupils. Taking this as a liberal estimate, the 2,098 private kindergartens had 6,405 teachers and 93, ron pupils in $189 \%-98$. The statistics of the private kindergartens as thus estimated will be found summarized in the last three columns of Table 1 on the next page.

Estimating that the private kindergartens in 18:9-1900 had an enroilment of 100,000 , the number of children receiving instruction in kindergartens was not less than $231,65 \%$.
The following table gives the number of public and private kindergartens, the number of teachers and the number of pupils, as reported to this Office for certain years, beginning with 1873:

| Year. | Kindergartens. | Teachers. | Pupils. | Year. | Kindergartens. | Teachers. | Pupils. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $18 \% 3$ | 4.3 | 73 | 1,232 | 188: | 345 | 814 | 16,916 |
| 1874 | 55 | 125 | 1,636 | 1584 | 3 3 4 | 831 | 17,00\% |
| 1875 | 9.5 | 216 | 2,809 | 1885 | 415 | 905 | 18,832 |
| $18 \% 6$ | 130 | 364 | 4,090 | 1886. | $41 \%$ | 945 | 21,640 |
| 18\% | 129 | 336 | 3,931 | 1887. | 544 | 1,256 | $2 \overline{2}, 9 \times 5$ |
| 1578 | 159 | 376 | 4. 797 | 1888. | 521 | 1,202 | 31,227 |
| $18 \% 9$ | 195 | 45, | 7.554 | 1892 | 1,311 | 2,535 | 65.296 |
| 1880 | 232 | 524 | 8,871 | 1895. | 2, 884 | อั, \%64 | 143,720 |
| 1881 | $2 \% 3$ | 6.6 | 14,10 a |  |  |  |  |

Table 1.-Statistics of public kindergariens reporting for 1899-1900, and private kindergartens reporting and not reporting for 189\%-98.

|  |  | Public kindergartens, 1899-1900. |  |  |  |  | Private kindergartens reporting and not reporting in 1897-38. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Pupils. |  |  |  |  |  |
|  |  | Number of schools. | Number of teachel's. | Male. | Female. | Total. |  |  |  |
| United States | 230 | 1,815 | 3.323 | ย0. 131 | 65, 5\% 6 | 131,65\% | 2,996 | 6,315 | 93,737 |
| North Atlantic Division_ | 134 | 986 | 1,68 | 31,609 | $3: 2,105$ | 63, 214 | 1,112 | 2, $00 \%$ | 32,913 |
| South Atlantic Division - | 4 | $21$ | 12\% | + 463 | , 483 | . 946 | 1, 294 | 2, 586 | 8,377 |
| South Central Division .- | 12 | 36 | 65 | 1,6\%\% | 1,846 | 3,493 | 1.6 | +12 | 5,692 |
| North Central Division.. | 80 | 659 | 1,300 | 23,634 | 2, 325 | 33, 96\% | 1.040 | 2, 62\% | 35, 946 |
| Western Division ........ |  |  | 215 | 4.710 | - 4,767 | 9, $17 \%$ | $3 \% 4$ | 683 | 10,809 |
| North Atlantic Division: <br> Maine | 5 | 10 | 16 | 205 | 168 | 373 | $4 \%$ | \%9 | 1,096 |
| New Haupshire..... | 4 | 14 | 2 | 406 | 398 | 804 | 7 | 12 | 1,194 |
| Vermont.-.....-...-- | 2 | 10 | 15 | 5!1 | 486 | 1,02\% | 15 | 23 | 299 |
| Massachusetts -------- | 32 | $\therefore 1 \%$ | 420 | 6, 880 | 6, 836 | 13,616 | 186 | 334 | 4,514 |
| Rhode Island. | 5 | 37 | 63 | 1, 250 | 1,23i | $2,48 \%$ | 23 | 45 | \%13 |
| Connecticut | 15 | 69 | 154 | 1,89\% | 1,878 | 3, 713 | 84 | 156 | 2,207 |
| New York. | 42 | 317 | 509 | 10,514 | 10,958 | 21,533 | 415 | $84 \sim$ | 14,769 |
| New Jersey | 21 | 129 | 203 | 5,533 | 5, 386 | 10.919 | 96 | 159 | 2, 444 |
| Pennsylvania | 8 | 183 | 285 | 4,485 | 4, is8 | 9.243 | 239 | $44^{2}$ | 6,6\%\% |
| South Atlantic Division: <br> Delaware |  |  |  |  |  |  | 32 | 56 | \% $\% 9$ |
| Mary land ............. |  |  |  |  |  |  | 65 | 135 | 1,986 |
| District of Columbia. | 1 | 16 | 16 | $\stackrel{93}{ }$ | 316 | 614 | 58 | 108 | 1, 422 |
| Virginia |  |  |  |  |  |  | 18 | 36 | $51 \%$ |
| West Virginia |  |  |  |  |  |  | 3 | 9 | 159 |
| North Carolina |  |  |  |  |  |  | 27 | 54 | 996 |
| South Carolina |  | $\underset{\sim}{1}$ | 1 | 15 | 12 | 27 | 6 | 12 | 190 |
| Georgia..... | 2 | n | $10$ | 1.0 | $15 \%$ | 30.5 | 61 | 131 | 1,730 |
| Florida |  |  |  |  |  |  | $\because 4$ | 45 | 1,603 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Kentucky <br> Tennessee | 4 | 12 | 85 | 950 | 1,04: | $2,00 \%$ | 54 39 | 138 | 1,914 |
| Alabama | \% | 2 | 2 | 81 | 81 | $16: 3$ | 14 | 29 | 376 |
| Mississippi | ? | $\pm$ | - 6 | 91 | 155 | $\because 46$ | 6 | 11 | 198 |
| Louisiana. | $\stackrel{2}{2}$ | 15 | 26 | 403 | $4 \%$ | 876 | 26 | 81 | 951 |
| Texas... | \% | 3 | 6 | 109 | 98 | $20 \%$ | 23 | 41 | 567 |
| Arkansas |  |  |  |  |  |  | 5 | 13 | 186 |
| Oklahoma |  |  |  |  |  |  | 3 | 5 | 76 |
| Indian Territory ... |  |  |  |  |  |  | 3 | 10 | 151 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Onio <br> Indiana | 12 | $5:$ 39 | 93 60 | 1.514 900 | 1,508 986 | 3,020 1,892 | 193 98 | 473 263 | 6,201 5,181 |
| Illinois. | 6 | 97 | 199 | 4,0\%5 | 4, 117 | 8,202 | 276 | $76 \%$ | 8,876 |
| Michigan | 18 | 79 | 113 | 2,489 | 2,546 | 5, 035 | 125 | 263 | 3,925 |
| Wisconsin | 20 | 126 | 280 | 7,228 | 7,316 | 14,544 | 58 | 161 | 2,230 |
| Minnesota | 3 | 5.5 | 93 | 2,3\%9 | 2, 430 | 4, 759 | 88 | 231 | 3,279 |
| Towa ... | 9 | 46 | \%5 | 1,408 | 1,456 | 2,864 | 54 | 125 | 1,688 |
| Missouri | \% | 123 | 330 | 5, 167 | 5, 415 | 10,582 | 77 | 168 | 2,342 |
| North Dakota |  |  |  |  |  |  | 9 | 17 | 243 |
| South Dakota . |  |  |  |  |  |  | $\stackrel{7}{9}$ | $1 \%$ | 221 |
| Nebraska . | 3 | $4 \%$ | 85 | 1,5\%1 | 1.321 | 3,04: | 19 | $5 \%$ | 488 |
| Kansas.............. |  |  |  |  |  |  | 42 | 90 | 1,272 |
| Western Division: <br> Montana |  |  |  |  |  |  |  |  |  |
| Montana....... <br> Wyoming |  |  |  |  |  |  | 3 y | 35 68 | 498 101 |
| Colorado. | 3 | 98 | 54 | 1, 蚛 3 | 1,40: | : 2,825 | 30 | 58 | 798 |
| New Mexico.----- | 1 | 1 | 1 | 40 | 1, 45 | 85 |  |  |  |
| Arizona |  |  |  |  |  |  | 3 | 7 | 88 |
| Utah | 1 |  |  |  | 40 | 75 | 30 | 68 | 965 |
| Nevada | 1 | 1 | 2 | $\because 3$ | 37 | 60 | $\because$ | 3 | 49 |
| Idaho | 1 | 1 | 1 | 10 | 15 | , 25 | 4 | 6 | 80 |
| Washington | : | 10 | 15 | 541 | 486 | 1,02i | 53 | 91 | 1,203 |
| Oregon.....- |  |  |  |  |  |  | 41 | 79 | 1,092 |
| California | 11 | $6 \hat{}$ | 139 | 2,638 | 2, 642 | 5, $3 \times 0$ | 189 | 330 | 5,875 |

TABLE 2.-Public kindergartens in cities of over f. 100 poputation in 1892-1900.

| State andrity. | Kindergartens. | Instruct ors. | Pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Male. | Female. | Total. |
| Anniston* ................... |  |  |  |  |  |
| Florence | 1 | 1 | 24 | $\begin{aligned} & 55 \\ & 16 \\ & 16 \end{aligned}$ | 1.48 |
| Los Angeles . .................. | 38 | 80 |  |  |  |
| Oakland *. | , |  | 1.25 | 1.218 | 2, 32 |
| Pasadena. | 1 | 3 | 30 | 40 | () |
| Pomona | $\because$ | 5 | 1675 | $\% 0$ | 1,375 |
| Riverside | 1 | 2 | 33 | 27 | 60 |
| Sacramento | 6 | 11 | 155 | $12 \%$ | 288 |
| Santa Ana | 2 | 4 | 36 | 36 | 73 |
| Santa Barbara | 4 | 6 | 119 | 123 | 242 |
| Santa Cruz | 1 | $\stackrel{3}{2}$ | 35 | 37 | \% |
| San Diego . | 6 | 14 | 207 | 188 | 395 |
| San Jose.. | 5 | 11 | 218 | 219 | 4.37 |
| Denver: ${ }^{\text {cotorado. }}$ |  |  |  |  |  |
| District No. 1 ,............... | 20 | 41 | $96 \%$ | 937 | 1,919 |
| District No. ${ }^{\text {a }}$ | 5 | 10 | 355 | 342 | 697 |
| Pueblo District, No. 20. | 3 | 6 | 106 | 118 | 209 |
| connecticut. |  |  |  |  |  |
| Bristol | 3 | 6 | 133 | 123 | 256 |
| East Hartford.. | 3 | 6 | 91 | 90 | 181 |
| Greenwich . |  | $\because$ | 70 | 85 | 155 |
| Hartford | 14 | 50 |  |  |  |
| Manchester (South) |  |  | 134 | 156 | 290 |
| Naugatuck | 2 | 3 | 90 | . 2 | 162 |
| New Britain. | 8 | 16 | 292 | 308 | 600 |
| New Haven. | 13 | 呺 | 263 | 509 | 1,072 |
| New London | 2 | 4 | 36 | 32 | 68 |
| Norwalk*. | 5 | 10 | 136 | 140 | $2 \%$ |
| Norwich. | 5 | 10 | 119 | 120 | 299 |
| stamford |  | 3 | 38 | 37 | 75 |
| Wallingford | 3 | 6 | 124 | $12 \bigcirc$ | 252 |
| Winchester. | 2 | 5 | 69 | \% | 147 |
| Willimantic . | 4 | $s$ |  |  |  |
| district of columbia. |  |  |  |  |  |
| First to eighth divisions.... | 10 | 10 | 194 | 317 | 401 |
| Ninth to eleventh divisions | B | 6 | 104 | 109 | 213 |
| GEORGIA. |  |  |  |  |  |
| Augusta <br> Albany | 16 | $\stackrel{8}{2}$ | 125 | 130 20 | ${ }^{235}$ |
| IDAHO. |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Evanston |  |  |  | 1.2\% | ', 106 |
| Jacksonville | 1 | 3 | 20 | 2. | 45 |
| Lincoln ... | 1 | 2 | 22 | 33 | 54 |
| Nommouth. | 1 | 1 | 10 | 15 | 25 |
|  | 1 | 3 | 16 | 15 | 25 |
| indiana. |  |  |  |  |  |
| Aurora* |  |  | 10 | 88 | 38 |
| Bluffton | 1 | 4 | 49 | 40 | 89 |
| Evansville |  | 2 | 115 | 123 | 240 |
| Fort Wayne | 1 | 4 | 36 | 4 | 80 |
| Hammond | 4 | 8 | 196 | 198 | 394 |
| Indianapolis | , | 1 | 410 | 31 | 71 |
| Laporte ..... | ? | 4 | 65 | 56 | 121 |
| New Albany |  | 3 | 15 | 35 | 50 |
| Richmond | 3 | 3 | 7 | 15 | 146 |
| Terre Haute | 20 | 13 | $\therefore 39$ | 263 | 502 |
| Valparaiso... |  | 14 | 40 | 96 | 96 |
| Vincennes | 1 | $\sim$ | 30 | 33 | 65 |
|  |  |  |  |  |  |
| Cedar Rapids | 11 | 16 | 466 | 424 | 890 |
| Council Blufís | 8 | 15 | 150 | 250 | 400 |
| Creston - . . | 3 | 6 | 169 | 132 | 301 |
| Dubuque. | 5 | 10 | 206 | 179 | 385 |
| Junction City | 1 | ${ }_{\sim}^{1}$ | 10 | 15 | 25 |
| Marshalltown. | - | 1 | 131 | 145 | 281 |
| Oskaloosa.. | 3 | 10 | 119 | 152 | 210 |
| Waterloo ...................-. -- | 1 | 4 | 51 | 59 | 110 |

Table 2.-Public kindergartens in cities of over 4,000 population in 1890-1900Continued.

|  | State and city. | Kindergartens. | Instructors. | Pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Male. | Female. | Total. |
|  | KENTUCKY. |  |  |  |  |  |
| Frankfort ${ }^{\text {a }}$ |  | 1 | $1 \underset{2}{2}$ | 493 | 28.8 | 1, ${ }^{540}$ |
| Lexington* |  | 5 | 10 | 200 | 213 | 413 |
| Winchester*. |  | 1. | 1 | 10 | 14 | 24 |
| Laike Charles | LOUISIANA. | 1 | 1 | 25 | 25 | 50 |
| New Orleans. |  | 14 | 25 | 381 | 445 | -806 |
| Bangor | maine. |  |  |  |  |  |
| Bangor-...-... |  | 4 | $\begin{aligned} & 8 \\ & 1 \end{aligned}$ | 73 4 4 | 95 6 | 168 10 |
| Biddeford |  | 1 | 1 | 24 | 11 | 35 |
| Lewiston |  | 3 | 5 | 91 | 14 | 135 |
| Saco... |  | 1 | 1 | 13 | 12 | 25 |
| Andorer | massachuserts. | 3 |  | 59 | 50 | 109 |
| Attleboro |  | ? | 4 | 49 | ${ }_{62}$ | 111 |
| Boston |  | \% | 150 | 2, 686 | 2, \%11 | 5, 39\% |
| Braintree |  | ¢ | 8 | 81. | 89 | $1 \%$ |
| Bridgewater. |  | 1 | 2 | 20 | 26 | 46 |
| Brookline. |  | 11 | 18 | $24 \%$ | 235 | 477 |
| Cambridge |  | 12 | 24 | 383 | 420 | 803 |
| Dedham .-. |  | 2 | 4 | 40 | 40 | 80 |
| Easton.. |  | 1 | 8 | 30 | 28 | 58 |
| Fall River |  | 3 | ${ }_{6}$ | 200 | $11 \%$ | 317 |
| Greenfield |  | 2 | 2 | 38 | 35 | \%3 |
| Haverhill |  | 1 | 2 | 27 | 20 | 47 |
| Holyoke |  | 5 | 10 | 154 | 133 | 307 |
| Lowell. |  | 12 | 8 | 536 | 547 | 1,083 |
| Malden. |  | 5 | 10 | 146 | 151 | 297 |
| Medford |  | 6 | 8 | 190 | 186 | 376 |
| Milton. |  | $\pm$ | 8 | 117 | 110 | 227 |
| New Bedford. |  | 3. | 6 | 119 | 131 | 250 |
| Newton- |  | 12 | 28 | 343 | 352 | 695 |
| North Adams |  | 4 | 8 | 158 | 179 | 337 |
| Northampton |  | 3 | 7 | 58 | 81 | 139 |
| Peabody .- |  | $\ddot{\sim}$ | 4 | 38 | 33 | 71 |
| Revere. |  | 3 | 3 | 67 | 69 | 136 |
| Salem.. |  | 8 | 15 | 211 | 194 | 405 |
| Somerville |  | 5 | 10 | 139 | 160 | 299 |
| Springfield |  | 3 | 5 | 79 | 83 | $16 \%$ |
| Watertown |  | I | $\stackrel{2}{5}$ | 28 | 25 | 53 |
| Webster |  |  |  | 41 |  | 84 |
| Westfield . |  | 3 | 6 | \% | 3 | 57 |
| Winchester |  | 4 | 8 | 100 | 97 | 197 |
| West Springfiel |  | 3 | 6 | 104 | 105 | 209 |
| Worcester |  | 12 | 20 | 27\% | 27.2 | 544 |
| Big Rapids | michigan. |  |  | 60 | 70 | 130 |
| Cadillac ... |  | 5 | 5 | 130 | 145 | 275 |
| Coldwater |  | 2 | 1 | 23 | 29 | 53 |
| Detroit. |  | 17 | 39 | 621 | $60 \%$ | 1,228 |
| Delray . |  | 1 | 2 | 29 | 32 | 61 |
| Dowagiac. |  | 1 | 1 | 32 | 36 | 68 |
| Grand Haven. |  | 1 | 3 | 41 | 48 | 89 |
| Grand Rapids |  | 11 | 11 | 366 | 364 | \%3] |
| Holland -..... |  | 3 | 3 | 105 | 110 | 215 |
| Ironwood. |  | 4 | 11 | 216 | 192 | 403 |
| Kalamazoo |  | $\pm$ | 4 | 105 | 115 | 220 |
| Mienominee.- |  | 5 | 5 | 181 | 189 | 3.0 |
| Mount Clemens |  | 4 | 4. | 123 | 117 | 249 |
| Muskegon |  | 8 | 10 | 291 | 314 | 605 |
| Negaunee- |  | 1 | ${ }_{0}$ | ${ }^{6 \%}$ | \% 7 | 144 |
| St. Joseph |  | 2 | $\stackrel{3}{2}$ | 54 | 54 | 108 |
| Traverse City |  | $\stackrel{4}{2}$ | 2 | 45 | $4 \pi$ | 92 |
|  |  |  |  |  |  |  |
| Duluth | minnesota. |  |  | 634 | 630 |  |
| St. Paul |  | 27 | 56 | 1,385 | 1,575 | 2,960 |
| Winona . |  | 7 | 13 | 310 | 225 | 535 |
|  | mississipla |  |  |  |  |  |
| Vicksburg......- | ---.------------ | 1 | $\square$ | 91 | 155 | 246 |

Table 2.-Public kindergartens in cities of orer 4,000 papulation in 1890-1900Continued.


Table ?.-Public kindergartens in cities of over 4,000 population in 1890-1900Continued.


## CHAPTER XLVI.

CURRENT TOPICS.


#### Abstract

Contents.-Teachers' pensions and annuities.-Foreign students in German universities.Higher commercial schools in Europe.-Regulations relating to corporal punishment.-Regulations relating to vaccination.-Consolidation of schoois and transportation of pupils.Diseases in secondhand books.-Compulsory attendance law retoed in Missouri.-Statistics showing length of service of teachers. - Cost of high schools. - Women in school administra-tion.-Benefactions.-Compulsory education and child labor.-Free text-books.-Coeduca-tion.-Teachers's salaries.


## TEACHERS' PENSIONS AND ANNUITIES.

In Part II of the Annual Report of this Bureau of 1894-9.5 a lengthy article on " Pensions for Teachers" was published. The subject was at that time discussed in nearly all the large cities of the United States. and several associations of teachers, for the payment of annuities or pensions after a sated time of service or in cases of disability, were formed. Of these the Report of that year gives a full account; it quotes the laws and constitutions of these associations, gives information concerning their relations to the State. whether they were incorporated, or whether the establishment of a pension fund was authorized by the legislature; what rate of premium was required from the members, the amount of annuity paid to disabled teachers, and other minutix. The consensus of all concerned seemed to have been that 1 per cent of a member's salary was ample as an annual premium to insure him a pension in accordance with the amount of his salary.

But while there seemed to be few voices among teacher: that denounced or rejected the scheme, some doubt was expressed by pople engaged in the life insurance business as to the associations' ability to pay the stipulated pensions with a premium of 1 per cent of the members’ salary during service. It was urged that the premium be raised to, at least, 3 per cent, for sudden calls upon the fund might at any time deplete it so completely that the whole scheme would collapse if the premium remained so small as 1 per cent.

How prudent this note of warning was is seen from subseument events. Within three years for nearly all pension funds accumulated during the time of enthusiastic advocacy of the scheme, formed of 1 per cent of the members' salaries and sums realized from bazaars, concerts, and occasional bequests, the premium had to be raised. The funds of some cities were nearly wrecked by drafts upon them from pensioners, the number of which exceeded previous calculations. It is even to day interesting and instructive to read the timely warning as published in the Report mentioned at the beginning of this article (seep. 1108 of Annual Report of 1894-95). It was uttered by an insurance expert and was accompanied by mortality and income tables, both comprehensive and convincing. To see how the old plan of 1 per cent premium worked, a few cases of the Chicago pension-fund
administration may be cited. The first two pensioners of four consecutive years may be picked out as examples:


The whole amount paid to pensioners since the establishment of the fund in Chicago, up to January 1, 1900, was $\$ 100,249$, offset by only $\$ 5,216$ paid in by the beneficiaries of the fund. The disproportion between premium and benefit is glaring, especially if compared with the conditions of pension funds of teachers in Europe, a full account of which is found in Annual Report of 1898-99 (pp. 164-1i9). Hence it is not astonishing to hear that in Cincinnati (see Annual Report of $1808-99$, p. 1481) and in several other cities the administration of the teachers' pension funds soon needed reorganization. In some places it is now proposed to leave the premium as low as it is, but to reduce the maximum sum paid to a beneficiary to $\$ 500$ per annum; in others an increased premium is advocated; again in others the number of years of service before annuities are paid is increased. While all these changes are going on, new pension funds are formed. Thus, for instance, in Minneapolis (see charter below). Nowhere is a doubt expressed in the ultimate proper adjustment of the funds, their in and out flow, and all difficulties that have arisen in the administration of the funds can be met with legal enactments, statutory amendments, and local adjustments, and are being met promptly. If in any instance they showed too rapid depletion or decrease, the officers applied to their constituents, the teachers, and immediate steps were taken to save the institution, hitherto always with success.

In Ifinneapolis the scheme proposed is a municipal one. being part of the new city charter submitted to the State legislature in January, 1900. The principal features of the proposed law for Minneapolis are those providing for retention of 1 per cent from the salaries of the teachers and requiring the city council to appropriate each year in sum equal in amount to the contribution of the teachers. The term of service is fixed at twenty years for both male and female teachers, the maximum pension is $\$ 500$, and payment terminates on death of beneficiary. The fund is not to be drawn upon until there is in it the sum of $\$ 10,000$. If the fund should prove inadequate, pensions are to be prorated.

Following is the proposed law in detail:
Section 1. There is hereby created a retirement fund under the name of the Minneapolis Teachers' Retirement Fund.

SEC. 2. It shall consist of: (a) One per cent deducted monthly from the salaries of the teachers, other than substitutes, regularly employed by the board of education of the city. (b) Ali moneys appropriated by the city council to said fund. (c) All deductions made from the salaries of said teachers from whatever cause, whether made under contracts in force at the time this charter goes into effect or thereafter. (d) All moneys turned into said fund from any other sources whatsoever.
SEC. 3. From and after the expiration of the time for which the salary of any teacher was fixed prior to the adoption of this charter there shall be deducted each month from the monthly salary of every such teacher an amount equal to 1 per cent thereof, and paid into the said retirement fund.
Sec. 4. The city treasurer shall deduct and pay into the said fund the said 1 per cent each month at the time he pays the salaries of the said teachers, and no teacher shall have the right at any time to recover the amount so deducted from said salary.

SEc. 5. In making the annual appropriation for the schools of the city of Minneapolis the city council shall include in such appropriation for the use and benefit of the Minneapolis Teachers' Retirement Fund a sum of money equal to 1 per cent of the salaries paid the teachers, other than substitutes, regularly employed by the board of education during the preceding fiscal year.

The sum so appropriated shall be annually paid to the city treasurer as custodian of said teachers'retirement fund, and together with the fines described in section 2 shall be by him disbursed only on the warrant of the board of education.

SEC. 6. The city treasurer of the city of Minncapolis shall be the custodian of said fund, and shall be liable on his official bond for the safe-keoping of same.

Sec. 7. The board of education shail have the charge and management of said fund, and shall invest and disburse in such manner and under such rules and regulations as it shall deem proper. subject, however, to the provisions of the following sections.

The board shall annually report the condition of said fund to the city council.
SEC. 8."Whenever said board of education decides that the general efficiency of the schools will be best served by the retirement of any teacher on accunt of age or physical or mental disability, said teacher may by a majority rote of a! the members of said board be permanently retired from service, and shall thereafter receive from said fund, provided he or she shall have served twenty years as teacher in the schools of the city of Minneapolis, and not otherwise, a monthly allowance equal to one-half of the amount of the salary said teacher was receiving at the time he or she was retired.

And further provided, That the maximum allowance under this provision shall be $\$ 500$ to any teacher in any one year, and that said allowance shall terminate upon the death of said teacher.

SEC. 9. No appropriation shall be made from said fund, nor shall any teacher be entitled to its benefits. until said fund shall have reached the sum of $\$ 10,000$, and no appropriation shall ever be made from said fund for any other purpose than the permanent retirement of those teachers entitled to its benefits as provided in the preceding section.

SEC. 10. If the amount in said fund shall at any time be insufficient to pay in full the allowances due under the provisions of section 8 of this chapter, then said board shall, as often as the exigency arises, scale down all allowances pro rata, so that no teacher justly entitled to its benefits shall ever be wholly denied same by reason of the insufficiency of the fund to pay all allowances in full.

SEc. 11. The word "teacher" as used in this chapter shall be construed as incinding all superintendents of instruction. including the superintendent of schools, and all special teachers, supervisors, principals, and instructors regularly employed by said board.

Interesting, also. are some of the particuiars of the workings of the pension laws of Greater New Forl, which are herewith given as quoted from the School Weekly of Chicago. They are taken from the annual report of the superintendent of schools and relate to the school year 1898-99.
Some items are as follows:
Total number of retired teachers .......................................................... 164
Number retired during year................................................................ 26
Deaths of retired teachers during year .....................................................

Balance of retirement fund July 31. 1899. exclusive of excisemoneys in Mianhattan and Bronx -......................................................... 45, 246.74
Queens 3,269.50

Amount of excise moneys, 1898, not apportioned .......................... 269, 094.83

Amount of interest moneys not funded
2, 631.01
These figures apply oniy to the boroughs of Manhattan and the Bronx, Queens, and Richmond. The city of Brooklyn has a pension law specially applicable to itself. The borough fund is maintained from the following sources:

1. All money, pay compensation, or salary, or any part thereof. forfeited, deducted, or withheld from any teacher or teachers for and on account of absence from duty from any cause.
2. All moneys received from donations, legacies, gifts, bequests, or otherwise, for and on account of said fund.
3. Apportionment of excise moneys amounting to Is per cent.
4. All such other methods of investment as may be duly and legally devised for the increase of said fund.

Althoagh the law has been in eaistence but two years, it will be seen that there are more pensioners than in Chicago. The amount paid out is thus far less than that paid to pensioners from (hicago schools. There is a balance in the treasury of nearly $\$ 50.00$, exclusive of the $\$ 270,000$ of ezcise money which has not yet been apportioned owing to an uncertainty in the construction of the law, but which is an asset of the fund.

The annuity is one-half the amount of annual salary drawn by the teacher immediately preceding retirement, but in no case exceeding $\$ 1,000$.
The board of education has power by a two-thirds vote of all its members, after a recommendation to that effect shall have been made by the city superintendent of schools, stating that the teacher is mentally or physically incapacitated for the performance of duty, to retire any female teacher of the public schools, including special teachers in the same, whoshall have taught therein during a period aggregating thirty years, and to retire any male teacher of said schools who shall have taught therein during a period aggregating thirty-five jears. The board may also, in its discret on. retire such teachers upon their own application, after the like period of service.

The fund is administered by the board of education and the money is kept in trust by the controller. No teachers have yet been retired in the boroughs of Queens and Richmond.
The pension law applicable to the city of Biool:ly" passed in 1896, is radically different to the borough law, and in many respects is similar to the Illinois law. The fund is secured by the board of education turning in to the fund 1 per cent of the salaries paid each month to the teachers who should, prior to that date, elect to come under the provisions of the act, and a similar deduction and disposition of the 1 per cent from the salaries of all teachers appointed after January 1, 1896. It will be noticed that the privilege of election is granted to such teachers as were in the employ of the board prior to the passage of the law. There is a provision for receiving money from beruest. The board of education is given the right to retire teachers under the following conditions:

Male teachers not under 60 years of age; female teachers not under 5y years of age who have taught not less than thirty years, of which twenty immediately preced ng the proposed retirement shall have keen in the public schools of Brooklyn. Each teacher retired receives one-half of the amount of salary received by the teacher at retirement, provided, however, that no pension exceeds the sum of $\$ 1,200$ per annom; and it is further required that no teacher shall be retired unless he or she shall have paid into the retirement fund an amount equal to 20 per cent of his or her amual salary at the proposed date of retirement.

A few statistics from the report of last year follow:
Number of teachers retired during year 4
Number of amnuitants died during year
Number on retired list July 31
1
Annuities paid year ending July 31 ............................................... \$20. 384. 77
Balance of retirement fund July 31, exclusive of excise moneys . ...... $\$ 36,853.95$
The Brooklyn law has not had the severe test given the Illinois statute.
In Cluicayo the necessity of amending the provisions of the pension law has been felt very acutely. A committee of revision was appointed in 1900. The report of this committea, which was laid before the convention of teachers interested in the fund on February 15,1901, recommends a series of amendments to the present law. The Chicago School Weekly says:

As far as possible the good features of the present law are retained. The principal changes relate to the financial features and the membership of the board. In drafting the amendments the committee has had to keep in mind the differences between the teaching and employees forces, the necessity of making the provisions sufficiently elastic that the board of trustees may make rules to meet emergencies. It is proposed to make the whole koard elective, except the superintendent, who is to be a member ex officio. The number of trustees is reduced to fourteen, including four school trustees and nine teachers and employees. The term of twenty-five years' service for full annuity, as now required, is recommended. A disability clause after fifteen years service is added, and a partial retirement clause after twenty years' service is favored. The disability annuity is subject to reviow, allowing the beneficiary after two years to return to her work. The twenty-year feature entitles the beneficiary to four-fifths of the annuity.

The maximum pension to be paid is $\$ 400$, as against $\$ 600$ at present paid. The contribution on the part of all teachers is the same, and no sum may be deducted from an amount exceeding $\$ 1,000$, and no one earning less than $\$ 19$ a month may participate in the fund.

Teachers will have deducted not less than 1 per cent nor more than 5 per cent of their salaries. Employees will contribute not less than $\$ 20$ nor more than $\$ 60$ a year. In response to the demand of the employees they will receive payments on a dependent and disability basis, and not annaity and disability basis, as in the case of teachers. As a result there will be two funds kept, one for employees and one for teachers. The money will be kept in three funds. A permanent fund, made up of gifts, legacies, and a certain amount set apart each year by the trustees, will be founded. Only the interest of this fund may be used. A reserve fund will be kept, made up of the annual surplus of receipts of the fund. This may only be drawn upon by order of a two-thirds vote. The general fund will be made up of the deductions from salaries.

The present annuitants will be provided for by regulation of the trustees. Every teacher who has been in the employ of the board since prior to 1893 will be given the privilege of electing to come into the pension plan. On all others the pension plan will be obligatory.

FCLL TEXT OF AMENDMENTS.
The text of the pension law, amended according to the report of the committee of fifteen, reads as follows:
Be it enacted by the people of the State of Illinois in the genera! assemblyf represented: That the board of education in cities having a population exceeding 100,000 inhabitants shall have the power, and it shall be the duty of said board of education, to create (and maintain as hereinafter specified) a public-school teachers' and a public-school employees' retirement fund, which shall consist of-
(a) A permanent fund made up of gifts, legacies, bequests, etc., and a sum set apart by the board of trustees annually.
(b) A reserve fund which shall consist of the annual surplus of the general fund over the amount required to meet the current year's expenditures. Upon two-thirds rote of the contributors voting, any or all moneys in this fund may be transferred to the general fund.
(c) A general fund made up of the interest derived from said permanent and reserve funds and of amounts retained from the salaries or wages of teachers and employees, which amount shall be deducted in equal installments from said salaries or wages at the regular time for the payments of such salaries or wages and al? moneys which may be derived from any and all sources not mentioned in ( $a$ ). Said general fund shall be the only fund out of which benefits can be directly paid.
It shall be the duty of the board of education in cities where this act applies to provide such clerical help, printing, and legal assistance as the board of trustees of this fund shall deem necessary to carry out the provisions of this act.
The board of education sball, in the month of September immediately following the passage of this act, arrange for the election of a board of trustees of this fund, said election to be held not later than October 30 of the same year. This board shall have power, and it shall be its duty, to administer the fund and to interpret and carry out the provisions of this act.

## NUMBER AND DUTIES OF TRUSTEES

The board of trustees shall consist of four members of the board of education, the superintendent of schools, and nine teachers and employees, contributors to this fund.
The superintendent shall be ex officio a member of this board. The other members of the board shall be elected by the teachers and employees contribating to this fund, in the following manner:
At the first election there shall be elected by ballot from among the members of the board of education two members of the said board of education to serve for one year and two members of said board to serve for two years; and thereafter, in the manner and at the time prescribed in the rules of the board of trustees, two members shall be elected to hold office for two years, and at said first election the contributors shall elect three of their number to serve one year, three for two years, and three for three years, and annually thereafter the contributors shall elect three of their members to hold office for a perind of three years.
No trustee shall hold office for more than three consecutive years, and shall hold office only while a member of or employed by the board of education. This board of trustees shall have power:

1. To determine the amounts to be deducted from salaries or wages paid to teachers or employees, provided that in the case of those designated in this act as "teachers" it shall not bo less than 1 per cent nor more than 5 per cent annually of salaries received; provided that no deduction shall be made on any sum greater than $\$ 1,000$, and that in the case of those designated in this act as "employees" the amount deducted shall be not less than $\$ 30$ nor more than $\$ 60$ per year. They shall have power to establish a sliding scale of deductions.
2. To make payment from said general fund in pursuance of this act, and to administer and invest the fund or funds subject to sucli limitations as are provided in the act of which this act is amendatory.
3 To pay all expenses not otherwise provided for: first, out of the general fund: second, out of the reserve fund.
3. To fix, incresse, or reduce benefits at any time, provided that no annuity shall exceed 5400 per annum, and that all annuities for equal service shall be uniform in amount.
To take by gift, grant, bequest, or otherwise any money, real estate, personal property, right of property, or other valuable thing.
To have, hold, purchase. sell, assign, and transfer any of the securities in which any part of the said fund may be invested.
4. To fill any vacancy in the said board until the next annual election.
5. To make, in addition to rules for their own government, such general rules as may be necessary to carry out the spirit and intent of this act.

They shall keep full and complete records of their meetings, and of the receipts and disbursements on account of this fund; also complete list of and records of the annuitants and contributols.
They shall hear and decide all applications for benefits under this act. They shall have power to suspend any annuity granted for disability, provided such annuity is for a less number of years than four-fifths of the full term of service, whenever in their judgment the beneficiarv is able to work, or for other good cause.
They shall have power to frame a rule granting to dependents of employee-contributors a partial annuity or benefit.

They shall have power to liquidate any claim against the fund, provided there shall be no rule allowing restitution of deductions after said contributor shall have been eligible to benefits.
Members of the board of trustees may receive a salary or compensation not to exceed $\$ 50$ per year.

## RETIREMENT OE CONTRIBUTORS.

Any contributor upon retiring, after a perior of not less than twenty-five years of service and a like number of years of contributing to the fund of this act, or to the fund of the act of which this act is amendatory, shall be entitled to the full annuity then paid.

Any contributor upon retiring, after a period of not less than twenty-five years' service, and who lias contributed to the aforesaid fund less than twenty-five years, shall be ontitled to receive the full annuity then being paid, provided said teacher or employee shall contribute to the aforesaid fund a sum equal to the total contribution, with accrued interest for a full annuity; which sum shall be fixed by the board of trustees. If the aforesaid sum be not paid, then he or she shall be entitled to receive one-half of such portion of the full annuity then paid as his or her years of contributing to the aforesaid funds bear to twenty-five years, plus the ratio which the total amount deducted from said contributor's salary bear's to the total amount of the full contribution.

## PENSIONERS UNDER PRESENT ACT.

Any annuitant receiving a pension under the law of 1898 , of which this act is amendatory, shall, upon the passage of this act, cease to receive benefits under the said law, but in lieu thereof shall be entitled to receive such portion of the full annuity fixed by the board of trustees under this act as his years of contributing to the fund of this act and of the act of which this act is amendatory bear to twenty-five years or' the board of trustees may provide. That annuitants under the act of 1895 may receive $t u l l$ annuities under this act, provided they shall pay into this fund a sum which, together with that already contributed by them, shall equal the total contribution of twenty-five years, with accrued interest; said amount to be fixed by the board of trustees.

All moneys contributed to the fund of the law of 1895 and now on hand shall be transferred to the reserve fund of this act.
The term "employee" under this act shall include engineers, janitors, janitresses, and office employees, and the term "teacher" shall include superintendent, district superintendent, supervisor, special teacher, principals, teachers.

Any teacher or employee who has been contributing to this fund less than fifteen years, or fund of act of which this is amendatory, and who shall be dismissed from service of said board of education, may upon application within three montlis after date of such retirement receive one-half of the total amount paid by such teacher into such fund.
This act shall not be binding upon teachers or employees in the service prior to January 1,1896 , but such of these as choose may come under its provisions by notifying the secretary of the board of trustees to that effect on or before July 1, 1902.
This act shall not apply to teachers or cmployees earning less than $\$ 49$ per month.
No teacher or school employee who is a contributor to the fund created under this act sliall be removed or discharged except for canse, upon written charges which shall be investigated and determined by the board of education, whose action and decision in the matter sball be final.

Benefits can not be assigned, mortgaged, or attached.
The city treasurer shall be custodian of aforesaid permanent reserve and general funds and shall secure and safely keep the same, subject to the control and direction of said board of trustees, and shall keep books and accounts concerning said fund in such manner as may be prescribed by the said board, and said books and accounts shall always be subject to the inspection of the said board or any member thereof.
The treasurer shall, within ten days after his election or appointment, execute a bond to the city with good and sufficient securities in such penal sum as the said board of trustees shall direct, to be approved by the said board, conditioned for the faithful performance of the duties of his office, that he will safely keep and well and truly account for all moneys and profits which may come into his hands as such treasurer and that on the expiration of his term of office he will surrender and deliver over to hissuccessors all unexpended moneysand all proper'y which may come into his hands as treasurer of such fund. Such bond shall be filed in the office of the clerk of such city, and in case of a breach of the same or the conditions thereof, suit may be brought on the same in the name of said city for the use of said board of trustees or by any person or persons injured by such breach.
The president and secretary of such board of education shall certify monthly to the city treasuler all amounts deducted from the salaries of the board of education in accordance with the provisions of this act, as well as all other moneys contributed to the said fund.
One feature of the Chicago pension law was particularly objectionable to some teachers, to wit, the compulsory nature of the measure; hence many advocated having an optional clause inserted, so that teachers who do not desire to enter the membership shall not be obliged to do so. This idea was agitated throughout the city and found many friends. The board of trustees of the fund themselves favor
this. A committee has arranged with Chicago representatives to introduce the bill to the legislature at Springield. Following is an address to the legislature:

## To the members of the forty-second general assembly of the State of Illinois:

The present teachers' pension law went into effect July 1, 1895. Under it each teacher in the Chicago public schools receives but 99 per cent of his salary and the remaining 1 per cent goes into the pension fund. It has been evident for some time that the income was utterly inadequate, and the teachers in both the grammar and high schools are practically unanimous in opposition to the present law.
The following petition has been signed by 2,463 teachers in the Chicago public schools, and 90 schools have not yet (March 21, 1901) been heard from:
"We, public-school teachers and employees in the city of Chicago, are opposed to the present pension law, or the enactment of any so-called pension law or retiring fund containing a compulsory clause."

We simply ask that the present or any proposed pension law be so amended that teachers may participate in its obligations and benefits or not, as they choose. We urge this for the following reasons:

1. If the pension law is desirable it does not need to te compulsory, a simple enabling act is enough. A voluntary pension system could live if any considerable part of our teaching force really wanted to contribute to a fund so that they might draw an annuity in their old age. Why is it neces ary to force other teachers into it against their wishes and judgment?
2. Wise provision fior one is not necessarily wise provision for another. Some may want an annuity for their old age, others, life insurance, while still others may want neither. Each should be free to choose for himself. Most of the men teachers are married and have families depending upon them. If they die in the service their wives and children get nothing; their contribution to the pension fund is a dead loss. This money was earned by them. and they should have the right to determine the manner of its expenditure,

Practically the same is true of a great number of our women teachers. Many of them are the main breadwinners in families; and probably the maiority of them contribute to the support of mothers or brothers or sisters, for our teachers are not drawn from the wealthy. Suppose one of them dies, what becomes of her contributions to the pension fund? While her relatives are raising the money to meet her iuneral expenses, if we may judge from the course of many of our present annuitants, her money may be spent by some pensioner on afternoon teas. Is it right to compel her by law to contribute to this pension fund against her own judgment?
3. According to an estimate made by Mr. W. E. Watt. only one out of every twenty-five contributors will ever receive a pension. The rest resign or get married or accept positions elsewhere, or die in the service. This is doubtless a fine thing for the one, brat how about the other twenty-four? It has a little the appearance of a lottery in which there is one prize for every twenty-five tickets. We do not ask that the lottery be abolished, but we ask that the law shall cease compelling us to purchase tickets.
4. We hold that everyone (including public-school teachers) should be free to spend the dollar earned in accordance with individual judgment.
According to a table prepared for the School Weekly, showing the amount of money paid into the pension fund by each individual pensioner and the amount each had drawn out up to January 1, 1900, the total amount paid by those who were then drawing pensions was $\$ 5,216$ and the total amount they had received was $\$ 100,249$. On the average each annuitant had received $\S \sim 89$ and paid in $\$ 41$.
(Signed by committee) W.J. Harrower, Mary Wibirt, Hiram B. Loomis, Charles H. Perrine.

## THE MOVEMENT IN OTHER STATES.

The following account of the movement in other States is also taken from the Chicago School Weekly:
A report of the working of the New Jersey teachers' retirement fund shows that twenty-nine teachers are now receiving annuities of $\$ 316$ and a total of $\$ 8,000$ has been paid out. The fund was estabished in 1896. It is maintained by contributions of 1 per cent from teachers' salaries.
In the New York State assembly a bill has been introduced under the provisions of which the board of education may retire, by a two-thirds vote of all its members, incapacitated women superintendents, tutors, and critic teachers in the normal college or its training department who have taught thirty years in that institution or in the public schools.

## FOREIGN STUDENTS IN GERMAN UNIVERSITIES.

While during the summer semester of 1899 there were $2,28 \pm$ foreigners matriculated in German Universities, the number reached nearly $2, \% 00$ in the winter of 1900-1901. This number does not include about 2,000 foreign "hearers" who can not be matriculated as regular students owing to their want of the preparation prescribed by law; nor does the number include the foreign students of polytechnica, art academies, music conservatories, and agricultural, forestry, and mining academies. The Annual Report of this Bureau for 1893 gives a summary of foreign students in polytechnica and agricultural, forestry, and mining academies for that year, which shows a total of 1,276 . If the art and music students were added, the total number of foreign students in higher institutions in Germany would rise to 4,000 . The following figures have reference to foreign university students only.

Of the 2,284 students mentioned 563 studied philosophy, philology. and listory; 480 studied mathematics and natural science; $4 \pi$ studied medicine; 299 , law; 284, agriculture, forestry, and political economy; 150, theology, and 31, dentistry; making a total of 2,414 , which indicates that some- 130 -studied in two faculties.

The "hearers" (nonmatriculated students) have all the privileges of regular students, such as attendance at lectures and exercises, use of library, laboratories, and other agencies if they pay the prescribed fees; but not being matriculated, their names are not kept on the rolls, nor can they acquire degrees or compete in State examinations, the successful passing of which opens up a career in the service of the State, which is coveted by native Germans and is granted almost exclusively to them.

Foreign students came from nearly all the civilized countries. From Russia 594, Austria-Hungary 467, Switzerland 289 , England 159, Bulgaria 69, the Netherlands 50, France 41, Servia 39, Italy 3i, Turkey 33, Roumania 32. Sweden and Norway 81, Luxemburg 24, Greece 23, Belgium 19, Denmark 3, Montenegro 3, Spain 3; total from Europe, 1,85i. From Asia, chiefly from Japan, came 101; from Africa 21 , from Australia 5, and from America 300. The report fails to specify from what part of America the last mentioned came.

The total number of matriculated students in German universities has increased 20 per cent in five years. The number of foreigners among them has increased at a slightly larger ratio, to judge from partial returns, but most of these foreigners are found in the medical and philosophical faculties. Few foreign students study theology, and also comparatively few study law in Germany.

The following numbers will show which universities are preferred by foreigners: Berlin had in 1899655 foreign students, Leipzig 392, Heidelberg 205, Munich 190, Halle 188, Freiburg 95, Göttingen 93. Strassburg 「5, Jena ir1, Marburg 66, Würzburg 59, Bonn 50, Königsburg 49, Tübingen 48, Breslau 40, Giessen 35, Erlangen 33, Greifswald 22, Kiel 22, Rostock 7, and Münster 2. In 1900 Berlin had 714 foreign students.

For detailed statistics concerning the attendance of women in the universities of the Kinglom of Prussia, see the Annual Report of this Bureau for 1898-99, Vol. 2 , pages 1486-1489. The number of women studying in Berlin in 1900 was 439. In 1900 at the University of Berlin there were 366 students matriculated in the faculty of theology, 2,359 in the faculty of jurisprudence, 1,312 in the faculty of medicine, and 2,636 in the faculty of philosophy. With respect to nationality $4,6 r 9$ students came from Prussia, 994 from the other States of the Empire, and $\boldsymbol{\gamma} 14$ from foreign countries. Of foreigners of European origin the majority (318) come from Russia, 112 from Austria, 88 from Switzerland, 62 from Hungary, 32 from Great Britian and Ireland, 22 from Italy, 20 from France, 20 from Roumania, $1 \%$ from Turkey, 17 from Servia, 16 from Bulgaria, 15 from Sweden, 15 from Greece, 12 from the Netherlands, 11 from Luxemburg, 5 from Belgium, 4 from Spain. 3 from Denmark, and 1 from Portugal. Of foreign students from distant parts of the world 114
come from America, 62 from Asia, 3 from Africa, and 1 from Australia. Berlin University is therefore in reality cosmopolitan.
In addition to the duly registered students there are 5,466 persons who attend the lectures there as hearers not entitled to admission to State examinations, but allowed to acquire academic degrees.

In Switzerland during the winter of 1898-99 there were in the ten higher institutions 1,163 students who were residents of the canton in which the institutions are located, 1,465 were from other cantons, and 1,946 were foreigners, an increase of 346 in five years. Foreign students therefore form 42.5 per cent of the whole number of university students in Switzerland.

## HIGHER COMMERCIAL SCHOOLS IN EUROPE.

The subject of higher commercial education of the same grade as that afforded by the universities and technological institutions is still uppermost in the discussions on educational movements in Europe. Since a commercial university has been founded in Leipzig, other institutions of like or similar kind have been opened (1) in Aachen (Aix-la-Chapelle), Rhenish Prussia, in connection with the polytechnic institute at that place; (2) in Hamburg, where the wealthy leaders of transoceanic commerce have combined to establish a higher school, separate and distinct from any other educational institution; this new school is a commercial university, in which particularly the international commercial relations and modern languages are taught; (3) in Cologne, Rhenish Prussia, where the particular commercial interests of industrial Germany are represented. Hence, Germany has at present 22 universities, 10 technological institutes, 4 commercial institutions of university rank, and a number of higher agricu?tural. mining, and forestry schools, all of which are either independent institutions or affiliated with oldestablished universities.

Course of study of the Leipzig Commercial University. -In order to fully understand the high grade of this course, which is one of two years, it is necessary to know that admission is granted only to the graduates of gymnasia, i. e., classical or semiclassical high schools, which are virtually colleges. The nature of a German university precludes the prescription of any course of study. This can not be more clearly illustrated than by an analogy: A German university is like a restaurant in which one eats "à la carte," while the American university is like a "table d'hôte," where a set and prepared ment is served. This means that the German student, coming as he does to the university at 20 years of age, chooses his own mental fare, but certain advice is given him with an outlook toward the final examination.

The studies which are offered (" a la carte ") in this commercial university are political economy and all brancies related thereto, such as commercial history, economic or applied geography, and general technology, as well as commercial and marine law, law of exchange, and principles of the civil code, together with modern legis'ation affecting political economy and finance.

These studies are calculated to keep students busy during the four semesters. Only the most competent can master statistics, finance, jurisprudence, anthropological geography, ethnography, and similar studies within the same length of time. Still these studies are offered also, necessarily in condensed form. The curriculum of the university includes also correspondence and counting-house practice, commercial arithmetic, bookkeeping, mechanical technology of textile industry, and chemical technology. These latter branches are a continuation of studies found in commercial secondary schools, but more difficult problems are considered theoretically in the university. The practical exercises in commercial usages are held
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in the practice school, the former commercial high school, and since much importance is attached during the final examination to skill in commercial practice, these exercises are well attended. The university grants a " diploma of completion of commercial studies" after two years regular attendance and the passing of a final examination. In Hamburg and Aix-la-Chapelle the course is slightly different, owing to local needs.

Prof. H. Raydt, the director of studies in the Commercial University of Leipzig, publishes the course offered there in this way (the numbers in brackets signify the number of students pursuing the study during the first year after the opening of the institution):

General political economy [78]; commercial, exchange, and marine law [\%0]; legislation for commerce and transportation [56]; bookkeeping [58]; office work and correspondence [58]; commercial and political arithmetic [51]; technology of textile industry [27]; geography and colonization [24]; general technology [21]; chemical technology [21]; universal history of modern times [16]; geography of central Europe [13]; insurance mathematics [14]; introduction into the study of statistics [13]; history of the era of discoveries [7]; French and English commercial correspondence; French, English, Italian, Spanish, and Russian languages for beginners; German language for foreigners, and stenography with typewriting.

The number of students has very greatly increased !ince the first semester, when the foregoing items were noted.

From a recent educational bibliography published in the Educational Review (April, 1901) a few articles and books on the subject may be mentioned as having bearing upon the movement for higher commercial education in this country.

Adams, C. K.-The establishment of a school or college of commerce in the University of Wisconsin; appeared in Bulletin of University of Wisconsin. It is a report to the regents of the university advocating such a school.

Herrick, C. A.-Commercial education. This is a supplement to the fifth yearbook of the National Herbart Society.

James, E. J.-Commercial education in secondary schools. Appeared in Educational Monograms, N. M. Butler, editor.

Monaghan, J. C.-Industrial education in Germany. Appeared in Proceedings of University Convocation of the State of New York (thirty-eighth convocation).

Thurber, C. H.-Commercial education. Appeared in School Review (April, 1900).

What secondary studies are most valuable for a business life? Discussion appeared in Proceedings of the Thirty-eighth University Convocation of the State of New Yorlt.

The Annual Reports of the Bureau of Education contain a number of articles on the suloject. See-

Annual Report of 1896-97, page 207. Commercial education in Europe.
Annual Report of 1896-9\%, page 1498. Consular report on commercial education in Leipzig.

Annual Report of 1897-98, page 1644. Consular report on commercial education.
Annual Report of 1898-99, page 269. Textile schools in Europe.
Annual Report of 1893-99, page 1433. Consular report on higher commercial education in Antwerp.

Annual Report of 1899-1900, page 835. The German commercial clerk.

REGULATIONS RELATING TO CORPORAL PUNISHMENT IN OITIES OF OVER 100,000 INHABITANTS.
Corporal punishment is forbidden in the schools of -
The entire State of New Jersey. (New Jersey School Laws, 1899, p. 28, secs. 71 and 72.)

Boroughs of Manhattan and the Bronx, New York City. (Rules and Regulations, 1900, p. 62, sec. 64-1.)

Borough of Richmond, New York City. (Manual and Course of Study, 1899, p. 9.)
Chicago, II1. (Rules and Regulations, 1898, p. 28, sec. 62.)
Baltimore, Md. (Rules, 1900, p. 17, art. 11.)
Cleveland, Ohio. (Handbook, 1899-1900, p. 77, sec. 22.)
St. Paul, Minn., except to repel violence, etc. (Forty-first Annual Report, p. 153, sec. 134.)

Syracuse, N. Y. (Rules and Regulaiions, 1898, p. 30, sec. 20.)
Providence, R. I., in grades above primary; permitted only with parent's consent in primary grades. (By-laws, 1897, p. 23, art. 15.)
Toledo, Ohio. (Rules, 1885. p. 53, sec. 3.)

REGULATIONS IN Other Cities OE OVER 100,000 inhabitants.
Philadelphia, Pa.: There is no rule, but corporal punishment is said to have been abandoned by common consent.
For the borough of Brooklyn and the borough of Queens, New York City, there is no information at hand.
St. Louis, Mo.: May be administered only by a principal, or in his presence and by his consent. It must be avoided as far as possible. (Rules, 1897, p. is, rule 47, sec. 4.)
Boston, Mass.: Forbidden in high schoo's and kindergartens and as to girls in grammar schools. In any case it is restricted to blows upon the hand with a rattan. Each case must be reported through the principal to the superintendent. (Rules and Regulations, 1898, secs. 218 and 241.)
Buffalo, N. Y.: The schools must be governed as far as possible without corporal punishment. Except when the superintendent gives special permission to other teachers, only a principal or acting principal may infict it. (Charter and ordinances, 1896, Chap. XIV, p. 218, sec. 39.)
San Francisco, Cal.: May not be inflicted in the high schools or upon girls in any schools. It is permitted only in extreme cases and may be inflicted only by principals or by vice-principals, with the consent of principals. Excessive punishment is prohibited, only a strap or a rattan being allowed. (Rules, 1900, p. 2ॅ5, sec. 61.)

Cincinnati, Ohio: May not be inficted for failures in lessons or recitations. Blows on head or violent shaking of pupils prohibited. (Sixty-sixth Report Board of Education, 1895-96, p. 199, sec. 84.)

Pittsburg, Pa.: No recent information is at hand.
New Orleans, La.: May be inflicted only in extreme cases as a last alternative, and only by the principal or by his express authority. Must not be inflicted in the presence of the class or during lesson in which offense was committed. Blows upon the head and lonely confinement forbidden. (Rules and Regulations, 1806, p. 9, sec. 13.)

Detroit, Mich.: Must ke avoided if possible. Must not be inficted without full knowledge and consent of principal. (Rules Board of Education, 1888, p. 27, rule 89.)

Milwaukee, Wis.: Permitted, as last alternative, by principal only. Excessive punishment and lonely confinement prohibited. Must not be inflicted in presence of class. All cases must be reported monthly to superintendent. (Rules and Regulations Board of School Directors, 1893, art. 13, sec. \%.)

Washington, D. C.: Must be avoided if possible. All cases must be reported monthly to principal and through him and supervising principal to superintendent. (Rules, 1900, p. 10, sec. 50.)

Louisville, Ky.: Must be avoided as far as possible. Cruel punishment or confinement in closets prohibited. May be inflicted only after nature of offense has been fully explained to pupils. (Manual of School Board, 1898, p. 31, sec. 3, rule 3.).
Minneapolis, Minn.: Permitted only when all other means fail. Principals only may inflict corporal punishment; then only when parents give written consent. (Twenty-second Report Board of Education, 1899, p. 139, sec. 58.)
Indianapolis, Ind.: Must be avoided as far as possible. May be inflicted only in presence of principal, and inust be immediately reported by him to superintendent. (Manual of Public School, 1900-1901, rule 51, sec. 11.)
Kansas City, Mo.: May be inflicted in cases of flagrant offenses, and then only after duly notifying parents (or guardians) of intended punishment; and if parent or guardian will administer punishment, so as to preserve discipline of the school, teacher must inflict no additional punishment. Must not be inflicted in presence of school, but at the close of session and in presence of two other teachers or the superintendent. (Rules and Regulations Board of Education, 1888, p. 25, sec. 81.)
Rochester, N. Y.: May be inficted in extreme cases by the principal or. with his consent by an assistant. (By-laws and rules, Board of Education, 1898, p. 38, sec. ธ.)
Denver, Colo., district No. 1: May be inflicted only after consultation with and with consent of principal. When practicable, superintendent should be consulted. All cases must be immediately reported to superintendent. (Twenty-fifth Annual Report Board of Education, district No 1, 1899, ¡. 112.)
Allegheny, Pa.: Must be avoided when obedience and good order can be preserved by milder measures. (Rules, Twenty-sixth Annual Report Superintendent Public Schools, 1899, p. 109, sec. 3.)
Columbus. Ohio: Allowed when all other means have failed. To be inflicted in schoolroom by pupil's teacher, the principal being the judge of special cases. Punishment in the nature of personal indignity forbidden. (Report, 1890, p. 334, secs. 27, 28.)
Worcester, Mass.: Permitted only in extreme cases, then only when approved by principal or superintendent. Must not be inflicted in presence of school. Teachers are required to make and keep complete record of all cases. (Rules of School Committee, 1900, p. 22, sec. 12.)
New Haven, Conn.: May be administered, with consent of principal, in extreme cases only, but never at same session of school at which the offense was committed. Cases to be reported monthly to superintendent. (Manual, 1891, p. 56, sec. 176.)
Fall River, Mass.: May be inflicted where milder measures fail. Must not ordinarily be administered in presence of school. Record of each punishment and offense must be sent to superintendent for inspection of the board. (Rules and Regulations, 1894, p. 13, sec. 46.)
St. Joseph, Mo.: Must be avoided as far as possible. Each case to be reported to principal and by him monthly to superintendent. (Report, 1889-90, p. 170, sec. 12.)

Omaha, Nebr.: No information is at hand.
Los Angeles, Cal.: Must be avoided if possible; switch or strap to be used; blows upon face or head forbidden. (Report, 1893-99, p. 172, sec. 55.)
Memphis, Tenn.: Must be avoided when good order can be preserved by milder measures. (Manual, 1897-98, p. 53, sec. 48.)
Scranton, Pa. : No information is at hand.
Cambridge, Mass. : Prohibited except by written permission of the superintendent. When pupil persistently violates rules superintendent may give authority to inflict it for remainder of term, having sent due notice to parent or guardian. (Rules, School Committee, 1899, p. 15, sec. 76.)

## REQUIREMENTS AS TO VACCINATION IN THE PUBLIC SCHOOLS OF 19 CITIES.

A physician's certificate of raccination is required in-
New York. (Rules and Regulations, Manhattan and the Bronx, 1900, p. 64.)
Chicago, unless applicant has had smallpox. (Rules and Regulations, 1898, p. 30.)

Philadelphia, unless applicant has had smallpox. (Rules, 1897, p. 292.)
Boston, except where physician certifies that child is unfit for vaccination. (Rules and Regulations, 1900, p. 44.)
Cleveland, vaccination or other protection. (Fandbook, 1899-1800, p. 62.)
Buffalo. (Charter and Ordinances, 1896, p. 231.)
Detroit. (Rules, 1895, p. 24.)
Milwaukee. (Rules and Regulations, 1891, p. 44.)
Newark, unless child has had smallpox. (Report of 1899, p. 365.)
Providence. (By-laws, 1897, p. 20.)
OTHER PROYISIONS.
St. Louis, children admitted, provided they have been vaccinated. (Rules, 1897, p. ${ }^{78}$.)

Baltimore, vaccination or other protection from smallpox required. (Rules, 1900, p. 15.)

San Francisco, satisfactory evidence of vaccination required. (Rules 1900, p. 38.)

Cincinnati, satifactory evidence of vaccination required. (Manual, 1895, p. 198.)
New Orleans, satisfactory evidence of vaccination required. (Rules, 1896, p. 5.)
Washington, vaccination or other protection from smallpox required. (Rules, 1900, p. 1.)

Jersey City, vaccination or other protection from smallpox required. (Report 1896, p. 148.)

Louisville, evidence of vaccination or other protection required. (Manual; 1898, p. 23.)

Minneapolis, evidence of vaccination or physician's certificate that child should not be vaccinated is required. (Annual Report, 1900, p. 134.)

## TRANSPORTATION OF PUPILS TO SCHOOL.

The practice of consolidating small schools and transporting the more distant pupils to a central school at the public expense is now being carried out to a greater or less extent in eighteen States, to wit: Connecticut, Florida, Indiana, Iowa, Kansas, Maine, Massachusetts, Nebraska, Now Hampshire, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, and Wisconsin.

The amount expended for transportation in Massachusetts increased from $\$ 30,649$ in 1890-91 to $\$ 141,754$ in 1899-1500; in Vermont from $\$ 11,122$ in 1893-94 to $\$ 26,492$ in 1899-1900. These figures tend to show that the practice continues to spread where it has once gained a foothold. The case of Ohio might also be cited, where transportation was first tried in the torwnship of Kingsville in 1892; the next legislature extended it to three specified counties; as a result of the object lesson afforded, a general law covering the whole State was passed in 1898.

It is the general experience that a saving of funds is effected through consolidation of schools. Of the towns in Massachusetts that have tried the plan, 68 per cent report a less cost after consolidation, and only 8 per cent an increased cost. ${ }^{1}$

Of 124 New Hampshire towns, 118 report less cost with conveyauce as compared with maintaining local schools, 5 report the cost the same, and 1 the cost greater; 26 give the cost with conveyance as one-half of that with local schools, 8 give onethird, 7 give one-fourth, 3 give one-fifth, and 1 each one-sixth, three-eighths, twofitths, and three-fifths. ${ }^{1}$

Connecticut transported 849 pupils in 1898-99 at a cost of $\$ 12,000$, or $\$ 14.14$ per pupil; Vermont 2,032 pupils for one year at a cost of $\$ 26,492$, or $\$ 12.85$ per pupi1. These are averages. In individual cases the cost varies greatly according to to the particular circumstances in each case.
The testimony is very general that consolidation results in improved schools, and is well nigh unanimous that attendance is more regular. ${ }^{2}$

In cases where centralizing the schools would be beneficial it would seem that the manifest and fundamental advantages to be gained must in the end prevail over the inertia of conservatism, unreasoning prejudice, or petty self-interest, and such appears to be the actual trend of events; the just apprehensions of parents may be allayed by procuring fis and trustworthy drivers and making suitable regulations.

State Commissioner T. B. Stockwell, of Rhode Island, says: "I know of no other possible way whereby the rural sections of the State can ever again be provided with anything like suitable schools." ${ }^{3}$

## PRESENT STATUS.

Connecticut.-A law of 1889 provided for the discontinuance of small schools and their union with schools of adjoining districts. In 1893 free transportation of pupils was authorized. In 1899 the number of schools closed was 84; pupils transported, 849; cost, about $\$ 12,000$.

Florida.-" Several counties have inaugurated the system of consolidating the smaller schools and transporting the pupils by wagons." (Florida School Report, 1900, p. 19.)

Indiana.-"Forty counties have already begun the work of collecting pupils into larger groups by transporting them." (Indiana School Report, 1900, p. 529.)

Ioiva.-The law provides that where there will be a saving of expense, and childiren will also thereby receive increased adrantages, school boards may arrange for the transportation of any child to and from school.

Several places have taken advantage of this law.
Kansas.-" Our present law allowing districts to discontinue schools and send the pupils to other schools is inadequate." (Kansas School Report, 1900, p. 23.)

Micine.-By an act of 1893 and subsequent amendments schools having too few scholars may be suspended for one year; schools having less than eight pupils are discontinued. The superintendent of schools must provide transportation for all pupils who reside so far from school as to render it necessary, or may board scholars near schools.

Massachusetts.-A law of 1869 provides that the school committee of any town may expend money in their discretion in transporting pupils to and from school. "The smaller towns are consolidating generally their feebler schools and conveying their children to stronger central ones." (Massachusetts School Report, 1900, p. 182.)

There was expended for conveyance in 1850-91, $\$ 30,649$; in 1899-1900, $\$ 141,754$.
Nebraska.-A law of 1897 authorizes the transportation of pupils who live so far from school as to render attendance impracticable without transportation. A district board may contract for the instruction of all pupils in a neighboring districe and transport them thither.

Twenty-one counties contain schools in which one or both features of the law have been tried. Fifty-seven pupils were transported, at a cost of $\$ 560 ; 158$ pupils

[^144]attended school in adjoining districts for an average of seven months at a total cost of $\$ 1,471$. "Those making the report are unanimous in the opinion that the law is beneficial." "The difficulty in inaugurating any new system, where prejudice and long-established usages prevail, is met here as well as in other matters." (Nebraska School Report, 1900, pp. 40-43.)

New Hampshire.-Towns are authorized to expend a portion of the school money, not exceeding 25 per cent, in conveying children to and from school. (New Hampshire School Laws, 1898, chap. 32, sec. 1.)

New Jersey.-Children living so far from school that they are unable to attend may ive transported at the public expense. (New Jersey School Law, 1899, p. 43.)
New York. -School districts are authorized to contract with adjoining districts for the tuition of their children, and to convey them at the public expense; 150 such contracts were made in 1898-99. There are still in the State 3,552 districts (nearly one-third of the whole number) with an average attendance of 10 or less. (New York School Report, 1900, p. 55.)
North Dakota.-Schools with an average attendence of less than four on ten consecutive days may be discontinued. Two or more schools may be consolidated and pupils transported. (North Dakota General School Laws, 1899, sec. \%0t.)

Ohio. - In 1894 a special law was passed authorizing centralization and transportation in Kingsville, Ashtabula County. The experience of Kingsville is detailed at some length in the Report of this Office of 1898-99, pages 526-529. The succeeding legislature passed a measure applicable to the counties of Stark, Ashtabula, and Portage. In 1898 the law was made general. As it now stands boards of education may submit to a vote the question of township centralization, and must submit it upon petition of one-fourth the electors. (Ohio School Repor't, 1900, pp. 12-15.)

Pennsylvania has a law (dating from 1897) authorizing directors to provide transportation, but only for pupils of schools that have been closed by reason of small attendance, and who will have a greater distance to travel than before, and with the proviso that the cost per pupil shall not exceed the cost of maintaining the schools so closed.
Rhode Island.-A law of 1898 authorizes school committees to consolidate any schools that have an average number belonging of less than etwelve, and provide transportation for pupils. Any town may consolidate three or more ungraded schools. Any district with ungraded school many consolidate with district having graded school. The State pays $\$ 100$ to each district so consolidated. A few ungraded schools have been consolidated; the conveyance of the children still remains as the great obstacle. Two schools of Burrillville formerly cost the town $\$ 600$ per year. Consolidated with others the cost for transportation was \$427.50.
South Dakota.-"We understand the school laws of this State are sufficient to allow a school township to try this plan, or even two or more subdistricts may unite their schools into one, so that centralization may be tried in this State at once." (B. D. Kribs, in South Dakota School Report, 1900, p. 13.)
The reports of the county superintendents show that the question is much discussed and that a beginning has been made in three or four counties; elsewhere considerable opposition has been doveloped, principally on the part of parents.

Vermont.-On a written application from ten resident taxpayers of a town a portion of the school money, not exceeding 25 per cent, may be used to transport scholars who live $1 \frac{1}{2}$ miles or more from school. That transportation is growing in favor is attested by the fact that the expenditure for this purpose increased from $\$ 11,122$ in $1893-94$ to $\$ 26,492$-in 1899-1900. In 1899-1900 there were 726 schools closed all or part of the year and 2,309 pupils furnished transportation. There were still, however, in the last term 201 schools of 8 pupils or less each, a decrease of 34 from the preceding year.

Wisconsin.-The law now provides that any school district may make provision for closing its schools and sending its pupils to adjoining schools, and provide for the payment of tuition and transportation of pupils by taxation. (Wisconsin School Report, 1900, p.17.)

There are 955 schools in the State having an average daily attendance of not more than 10. Professor Upham reports that there is no organized transportation of pupils, though three counties are contemplating it. (Ib., p.22.)

## DISEASE IN SECONDHAND BOOKS. ${ }^{1}$

Secondhand schoolbooks have found their way into nearly every neighborhood and school in Kentucky; so have smallpox and other contagious diseases. Scarcely a county in the State has escaped the ravages of this contagion, and in most instances the manner of its approach is mysterious and unknown.

It is a well-known fact that contagious diseases may be communicated through secondhand clothing or other articles of cotton or woolen goods used by patients afficted with these diseases, unless such articles are thoroughly disinfected; nor does the disinfecting always destroy the germs of disease. This is true of secondhand books. While modern disinfecting is a great benefit, it does not always disinfect. Especially is this true of books. The outside may be thoroughly disinfected, and yet germs within-between the leaves-remain unharmed, unless the leaves, one by one, be subjected to the most careful fumigation. This process in itself would necessarily be so slow, and therefore expensive, that it would be cheaper to buy a new book than to sterilize an old one.

It is remarkable how long an old, soiled garment or an infected book will retain the germs of disease. The writer is well acquainted with a family that had smallpox twenty years ago; it was before vaccination was so extensively employed, and before the disease was so well understood by physicians as it is to-day. Every member of the family had the disease. When they had recovered, the house was disinfected well, it was thought, and the intense alarm in the village and surrounding country subsided. Twelve years passed; two other children were born into the family. The story of the smallpox and the terrible fright which it occasioned was almost forgotten, when the younger child, in his play, found some old yarn stockings which had been used by one of the family while he had smallpox, and which had been rolled up by nurse and put into an obscure corner of a closet. The child, not realizing danger, unrolled the garments. In a few days he had a well-developed case of smallpox. During the twelve years since the first attack in the family there had not been a case of the disease in the neighborhood, and the boy who contracted the disease in the manner just described had never been exposed to the disease in any way whatever prior to the time of finding the soiled garments. It is easy for disease germs, once in an old book, to be retained indefinitely, and finally communicated as readily as by an old garment.

Dr. A. J. Andrews, of Lexington, Ky., a graduate of the college of Physicians and Surgeons, New York City, director of the gymnasium of Kentucky University, and a practitioner of wide experience, says: "The use of secondhand books certainly might become a fruitful source of contagion. Pupils in our public schools should not be allowed to use secondhand books at all, especially when they do not know who used the books first, unless the books have been thoroughly disinfected; even then it is possible that some books will be overlooked. Better discard the use of them altogether. One case of smallpox, scarlet fever, or diphtheria may do more damage in a family or community than it is possible to repay by the savings on secondhand books in a lifetime."

[^145]Dr. J. B. Marvin, president of Kentucky University medical department in Louisville, and one of the most noted specialists in the South, says: "Experience of the medical world is in favor of contagiousness of smallpox, meas'es, itch, scarlet fever, and diphtheria, and the transmission of them through clothing, books, toys, etc. It is possible for these diseases to be communicated through the use of secondhand books. Pupils in our public schools should not buy and use a secondhand book used by a pupil while he had any of these diseases."

The boards of health in many of our cities are now investigating this question. County boards are looking into it also.

The Chicago Library board has a special committee at work on the subject of infected books now. The following is taken from partial report made by that committee as reported by the Chicago Tribune February 19, 1901: "Aill the books in the Chicago Public Library should be sterilized to prevent the spread of disease, according to the report of Dr. W. A. Kuflewski, submitted yesterday. Dr. Kufiewski was chairman of the special committee appointel by the library board two weeks ago to investigate the subject. He displayed several glass tubes containing countless germs taken from books in the library. He had examined 50 volumes, he said, and found them all more or less infected. He was convinced the books spread contagion." The committee was continued, and is now pushing its work.

Cincinnati is agitating the question, and at work on lines very similar to those of Chicago. The following clipping is taken from the Commercial-Tribune of January 22 last: "At the January meeting of the city hospital trustees, a letter was read from Dr. White, of the public library board, offering to deliver and return free of charge such books and periodicals as may be desired by the patients in the hospital."

The offer was promptly accepted at the time, and Messrs. Smith and Holmes were appointed a committee to confer with the library board to complete the arrangements.

Since then several meetings have been heid, but nothing has been done toward putting the project into effect, because of the discussion which has arisen over consolidating the two libraries.

Many of the local practitioners believe the hospital library should be transferred to the building on Vine street, but they heartily oppose the free-delivery scheme. They say it would be a constant menace to the public health, and, as evidence, they cite innumerable instances where contagion has resulted from books exposed to infectious diseases, sometimes after a period of fifty years.

Books are considered one of the best natural cultures for disease germs known, and no mode of sterilization will cleanse them. This fact has been recognized by the health department for a long time. Where books have been exposed even to the atmosphere of rooms in which contagion has been present they have been promptly ordered destroyed.
Mr. Green, the president or the library board, said last night that such a thing as sending books from a circulating library to a hospital could not be thought of. "The health department would not permit such a thing to be done. Every day the library is furnished with a statement from the health department of the houses where are contagious diseases, and no books are issued on cards to the people living at the addresses given until the department gives consent."
Dr. Healy, the health officer of Lexington, in speaking to the writer regarding the danger of using secondhand books, said: "There can be no doubt that dirty secondhand books can convey contagious diseases. Some Chicago houses are buying them in States which have made recent adoptions. They rebind them and brush them up a little and sell them all over the country. I find that there is really no economy in buying them, as the difference in price of the secondhand and the new books is only about 10 cents per book, on an average. The saving is,
too small, and the smallpox, measles, diphtheria, or scarlet fever taken from these books might do more damage than the savings of many years of their use would benefit us. I think our board of health will restrict the handling of such books by our dealers and regulate the secondhand schoolbook trade move carefully. We can't take the risk of leaving it altogether in the hands of the dealers."

It is also a fact that secondhand looks are now sold in large quantities in nearly all our county seats and school towns, and there is hardly a country store that does not have them. These looks have been gathered from every conceivable source; they have been used in the public schools of every race and colcr; they have been used by children of every degree of culture-from the best to the worst and most filthy-and when we permit a child to use such a book we have no way of knowing whose child used it first.

Kentucky has never had so much smallpox as within the last two or three years. Dr. McCormick, secretary of the State board of health, says that nearly every county in the State has had it. In some counties it has amounted to a fearful epidemic. A singular feature is that in so many places the disease seems to appear almost spontaneously; at least, the patient and physicians do not know where it came from. Even in counties having only a few cases it seems to be widely distributed.

No county has suffered a worse epidemic than Greenup. At one time nearly every neighborhood in the comnty had it. No county seems to have used more secondhand books in the country schools. A prominent educator of that county says: "Quite a number of secondhand books have been sold within the last few years. These books were bought of a firm in Chicago, whose agent told the dealers that the books came principally from Tennessee, when a change in books was made in that state."

It is a well-known fact that smallpox has been widely distributed over the State of Tennessee in recent years. This may be the source of the smallpox in Greenup County, and as for that matter, in many other localities throughout the State. What is true of smallpox is equally true of many other diseases. Besides the diseases mentioned above, it is well known that tuberculosis (consumption) is communicable by contact with the bacilii thrown off by the victims of this dread disease, and the secondhand book, vetter than almost any other medinm, can harbor and communicate such germs to unsuspecting users of them.

Under the circumstances, is it wise, safe, or economical to allow the indiscriminate use of secondhand books in our public schools and homes? Should we take any such risks? The cost of books is one of the least of all the expenses of the student. Why take such hazard when so little is to be gained? Besides, the filth of the thing is repulsive to children and teachers of good breeding. If we could always know whet child or children have used the books before us, the case would be different. But as it is, is it not almost as cleanly to wear the soiled garments of an unknown (probably diseased) person? What aesthetic, self-respecting child should be forced to use such books?

It is high time this state of affairs should come to an end.

## COMPULSORY ATTENDANCE LAW VETOED IN MISSOURI.

The Missouri legislature passed in 1901 a compulsory attendance law, which was vetoed by the governor. Following is the text of the law:

AN ACT to enforce the constitutional right of erery child in the State to an education, to provide for truantor parental schools and attendance officers in cities of ten thousand population or more, and to prohibit the employment of children during school hours.
Be it enacted by the general assembly of the State of Missouri, as follows:
SECTION 1. Every parent, guardian, or other person in the State of Missouri having charge and control of a child between the ages of eight and fourteen years
shall cause such child to attend regulariy some day school, public, private, parochial, or parish, not less than three-fourths of the entire time the school which said child attends is in session, or shall provide such child at home or elsewhere with such regular daily instruction during the usual hours as shall be, in the judgment of a court of record having criminal jurisdiction, substantially equivalent at least to the instruction given the children of like age at said day school in the locality in which said child resides: Provided, That every parent, guardian, or person in the State of Missouri having charge and control of a child between the ages of fourteen and sixteen years who is not actually and regularly and lawfully engaged in some useful employment or service shall cause said child to attend regularly some day school as aforesaid.
SEC. 2. A child between the ages aforesaid may be excused temporarily from complying with the provisions of this act in whole or in part if it be shown to the satisfaction of a court of record that said parent or guardian or person having charge and control of said child is not able through extremo destitution to provide or obtain in any way proper clothing for said child, or that said child is mentally or physically incapacitated to attend school for the whole period required or any part thereof, or that there is no public school taught within two and one-half miles of the residence of said child by the nearest trave'ed road, or that the labor of said child is absolutely necessary for the support of the family, or that said child has completed the common school course as pescribed by constituted authority nrits equivalent and has received a certificate of graduation therefrom.

SEC. 3. The board having charge of a public school in a city or district of three thousand or more fopulation by the last census may a ppoint and remove at pleasure one or more attendance officers to eaforce the provisions of this act and shall fix the compensation and manner of performance of the duties of said attendance officers and shall pay them from tho publie school funds: and the attezdance officers as aforesaid shall serve written or printed notices upon the parents, or guardians, or persons who, having clarge and control of children as aforesaid, violate the provisions of this act; shall, when reasonable doubt exists as to the age of any such child, require a properly attested birth certicate or an affidavit stating such child's age and date of birth and physical characteristics; shall have the right to visit and enter any office or factory or business house employing chi'dren as aforesaid; shall have the right to require a properly attested certificate of the attendance of any child or children at such day schcol; shall have power to arrest without warrant all truants and nonattendants as aforesaid and place them in some public school unless the parents or guardians or persons in charge and control of said children respectively shall at once place them in some other day school as aforesaid; and shall serve the legal notices and subpœnas of the court and make such required arrests in the cases which they prosecute without further fee or compensation than that paid by the board as aforesaid; and shall carry into effect such other regulations as may lawfully be required by the board appointing them.

SEC. 4. The board having charge of the public schools of any city or district having ten thousand or more population by last census may establish and maintain from the public school funds one or more ungraded truant or parental schoois in such city or district, or any such board may at its discretion purchase land and maintain such schools, either within or without their own school districts, for children who are between the ages of eight and sisteen years, and who are either habitual truants from any day school in which they are enrolled as pupils, or who while in attendance at any school are incorrigible, vicious, or immoral in conduct, or who habitually wander or loiter about the streets or roads, or other public places without lawful employment; and all such children shall be deemed juvenile disorderly persons, and may by said school board, throughits officer, or by a court having criminal jurisdiction in the city or district, bo assigned to and required and compelled to attend such truant or parental school or any department of the graded school as such board or court may direct.

SEC. 5. Any parent or guardian or person who having charge and control of a child befween the ages of eight and sixteen years, violates any provisions of this act shall be warned as aforesaid as soon as possible after the leginning of the pub. lic school term of the city or town or district in which such child resides, and also at any time thereafter by the attendance officer herein provided for, or by clerk of district when no attendance officer is provided for, to place and keep said child in regular attendance at some day school-within ten days from the service of said written or printed notice of warning, and upon failing to comply with this act after a lapse of ten days from the date of service of said notice of warning, said parent or guardian or person having charge and control of said child shall be deemed guilty of a misdemeanor, and upon conviction thereof shall pay a fine of not loss than ten dollars and not more than twenty-five dollars, or be imprisoned
for not less than two days and not more than ten days, or both such fine and imprisonment: Provided, That said sentence of fine or imprisonment, or both, may be suspended and finally remitted by the court with or without the payment of costs at the discretion oif the court if the said child be immediately placed and kept in regular attendance in some day school as aforesaid, and if such fact of regular attendance is proven subsequently to the satisfaction of said court by a properly attested certificate of attendance by the superintendent or teacher of said day school.

Sec. 6. Every board having charge of the public schools of any city or town or district in the State of Missouri shall, during the month of August of each year, publish this act in full for ten days in a newspaper published in the city or town or district or county in which the members thereof reside, or shall post copies thereof in ten or more public places as will in their judgment best give knowledge thereof to their constituents.

SEc. 7. No child between eight and fourteen years of age shall be employed in any mine, factory, workshop, mercantile establishment, or in any other manner during the usual school hours unless the person employing him shall first procure a certificate from the superintendent or teacher of the school he attended, stating that such child attended school for the period required by law, or has been excused from attendance as provided in section two; and it shall be the duty of such superintendent or teacher to furnish such certificate upon application of the parent, guardian, or other persons having control of such child entitled to the same. - Sec. 8. Every owner, superintendent, or officer of any mine, factory, workshop, or mercantile establishment, and any other person who shall employ any child between eight and fourteen years of age contrary to the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction shall be fined for each offense in a sum not less than twenty nor more than fifty dollars and costs. 5 Sec. 9. Prosecutions under this act shall be brought in the name of the State of Missouri, before any court of record having criminal jurisdiction, and the fines collected shall be paid over to the county treasurer and be credited to the permanent school fund of the county or city.
S Sec. 10. ${ }^{1}$ The provisions of this act are hereby suspended in the several counties in this State until a majority of the legal voters of any county voting at any general election shall decide to enforce same in such county, provided that only a majority of the legal voters voting on said question shail be necessary to decide its adoption or rejection, the question having been submitted by the county court on a petition of one hundred qualified voters.

EXPERIENCE OF TEACHERS IN CERTAIN CITIES.

| Cities. | 匈 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boston, Mass. $a$ | 1900 | 307 | 355 | $2 \% 5$ | 252 | 152 | 429 | b1,760 | 16.86 |
| Newark, N.J.c. | 1899 | ${ }_{211}^{221}$ | 119 | 102 | 94 | 56 | 85 |  | ${ }^{11.33}$ |
|  | 1899 | 180 | 48 | 5 | 34 | ${ }_{31}^{43}$ | $\stackrel{49}{5}$ | ${ }_{302}^{487}$ | ${ }_{14}^{11.08}$ |
| St. Louis, Mo. $f$....... | 1870 | 310 | 135 | 55 | 17 | 9 | ${ }_{5}^{5}$ | 531 | ${ }_{6.20}$ |
| Do. $f$. | 187 | 340 | 219 | 97 | 38 | 21 | 12 | 727 | \%. 38 |
| Grand Rapis, Mich. \% |  | ${ }_{93}^{138}$ | 1238 | 55 76 | $\begin{array}{r}185 \\ 49 \\ \hline\end{array}$ | $\stackrel{10}{10}$ | 16 8 | 376 305 | 8.78 10.93 |

[^146][^147]COST OF HIGH SCHOOLS.

| Cost. | Year. | Enrollment. | Expenditure. including incidentals. | Expenditure per pupil on basis of enrollment. |
| :---: | :---: | :---: | :---: | :---: |
| -Albany, N. Y | 1898-1899 | 741 | \$41, 621.27 | \$56.16 |
| Baltimore, Md | 1899 | 2,650 | 132, \%08. 52 | 50.07 |
| Boston, Mass. a | 1899-1900 | 6,5\% | b515, 181.49 | 78.96 |
| Chicago, IIl | 1898-1899 | 10, 123 | 536, 285.07 | 52.97 |
| Cincinnati, Ohio. | 1897-1898 | 2,228 | 86,447.02 | 37.13 |
| Cleveland, Ohio | 1898-1899 | 3,378 | 134, 610.78 | 39.84 |
| Louisville, Ky . | 1897-1898 | 1,405 | 73, 057.35 | 51.99 |
| Minneapolis, Minn | 1897-1898 | 2,480 | 105, 421. 69 | 42.91 |
| Philadelphia, Pa |  | 4,490 | 263, 448.58 | 58.69 |
| St. Louis, Mo. | 1898-1899 | 1,850 | 103,311. 70 | 55.69 |

$a$ Statistics of high and normal schools. Average enrollment in the normal school, 296 pupils. $b$ Includes $\$ 39,853.31$, proportion of general expenses.

## WOMEN IN SCHOOL ADMINISTRATION.

There are at present 2 women holding the position of State superintendent of schools, 12 that of city superintendent, 284 that of county superintendent. The status of women in respect to directive influence in school affairs is tersely summarized as follows:

Women may hold any school ofice in Connecticut, Idaho, Illinois, Indiana, Louisiana, Minnesota, North Dakota, Oregon, Pennsylvania, South Dakota, and Wyoming. Women may be county superintendents in Kentucky (if holding a State teacher's diploma), Montana (district offices also), Temnessee, and Wisconsin (city, town, and district offices also). Women may be commissioners and school district officers in New York.

Women may be local town or district officers in Arizona, California, Colorado, Iowa (where a woman must be a member of the State educational board of examiners), Maine, Massachusetts. Michigan, Nebraska, New Jersey, Ohio, and Vermont.

Women have like suffrage with men in Colorado, Idaho, Utah, and Wyoming. They may vote (1) on general school questions in Minnesota (at any election or at any district meeting), in North Dakota, and South Dakota; (2) on local school questions in Arizona, Iowa (on issue of bonds or increase of tax levy), Kansas, Kentucky (if widowed parents or guardians or spinster guardians of school children), Michigan. Nebraska, New York (if parents and taxpayers), Montana (at district elections), New Hampshire, New Jersey (restricted from voting for members of boards of education), Ohio (for members of boards), Oregon (widows with children to educate and taxpayers), Vermont (on all questions pertaining to schools), Washington (for directors), and Wisconsin.

Women State superintendents of public instruction.

| State. | Name. | Post-office. |
| :---: | :---: | :---: |
| Colorado <br> Idaho | Mrs. Helen L. Grenfell | Denver. |

Women city superintendents, 1899-1900.

| City. | Name. |
| :---: | :---: |
| Southington, Conn | Mrs. Anna D. Pollard. |
| Evanston, Ill--.... | Mary H.O'Brien (District No.3). |
| Bangor, Me ......... | Miss Mamie E. Dolphin. |
| Brewer, Me | Mrs. Mertie M. Curtis. |
| Old Town, Me | Miss Ardelle M. Tozier. |
| Orange, Mass | Miss Lizzie A. Mason. |
| Rockport, Mass | Mary L. Lincoln. |
| Malone, $\mathrm{N} . \mathrm{Y}$. | Sarah L. Perry. |
| Bristol, Pa | Louise D. Baggs. |
| Everett, Wash | Emma S. Yule. |
| Appleton, Wis | Carrie M. Morgan. |

Women county superintendents, 1890-1000.
CALIFORNIA.

| County. | Name. | Post-office. |
| :---: | :---: | :---: |
| Alpine | Mary Neddenreip | Fredericksburg. |
| Corusa | Lilie Laugenour | Colusa. |
| Mariposa | Julia L.Jones ... | Mariposa. |
| Modoc . | Anua L. Williams | Alturas. |
| Mono..- | Cornelia Richards | Bodie. |
| Man Bernardino | Mrs. J. ${ }^{\text {aring }}$ Chope | Salinas City |
| San Luis Obispo | Mrs. A. S. Woods | San Luis Obispo. |
| San Mateo. | Etta M. Tilton | Redwood City. |
| Shasta | Margaret I. Poore | Redding. |
| Sierra. | Josie Finane | Forest City. |
| Siskiyou | Efrie Persons | Y reka. |
| Sonoma | Minmie Coulter | Santa Rosa |
| Teliama | Lena K. Nangle | Red Bluff. |
| Trinity | Lizzie H. Fox | Weaverville. |
| Yolo... | Nirs.S.E. Peart | Woodland. |

## COLORADO.



Women county superintendents, 1839-1900--Continued.
IDAHO

| County. | Name. | Post-office. |
| :---: | :---: | :---: |
| Ada. |  | Boise. <br> Pocatello. <br> Blackfoot. <br> Hailey. <br> Idaho City. <br> Caldwell. <br> Challis. <br> Mountainhome. <br> St. Anthony. <br> Moscow. <br> Shoshone. <br> Lewiston. <br> Wallace. <br> Weiser. |
| Bannock |  |  |
| Blaine... |  |  |
| Boise. |  |  |
| Canyon. |  |  |
| Custer |  |  |
| Eramore |  |  |
| Latah... |  |  |
| Lincoin .- |  |  |
| Nez Perces |  |  |
| Shoshone -- |  |  |
| Washington |  |  |

## ILLINOIS.

| Alexander <br> DeWitt <br> Grundy .-. <br> Jackson.-. <br> Johnson <br> Pike <br> Puleski <br> Warren... | Mirs. P. A. Taylor <br> Mrs. Hattie P. Wilson <br> Miss Mary B. Holderman <br> Mrs. Emma M. Bryan <br> Miss Sarah J. Whittenberg <br> Miss Caroline Grote <br> Mis. Hester M. Smith <br> Mrs. Mary E.Sykes | Cairo. <br> Clinton. <br> Morris. <br> Murphysboro. <br> Vienna. <br> Pittsfield. <br> Mound City. <br> Monmouth. |
| :---: | :---: | :---: |

IOWA.

| Cherokee | Agnes J. Robertson. | Cherokee. |
| :---: | :---: | :---: |
| Clarke | Bertha Howard. | Osceola. |
| Clay- | Mrs. Ellen Reed Buck | Spencer. |
| Henry | Annie E. Packer | Crount Pleasant. ${ }^{\text {a }}$ |
| Howard | Elsie. E. Perry | Cresco. |
| Jefferson | Anna White | Fairfield. |
| Monroo | Mrs. Angie Reitzel | Albia. |
| O'Brien | Ella Eeckerson | Primghar. |
| Palo Alto | Anna Donovan | Eminetsburg. |
| Poweshiek | Viola H. Schell | Montezuma. |
| Wayne..... | Inez F. Kelso.. | $\begin{aligned} & \text { Washington. } \\ & \text { Corydon. } \end{aligned}$ |

## KANSAS.



Women county superintendents, 1899-1900-Continued.
KENTUCKY.

| County. | Name. | Post-office. |
| :---: | :---: | :---: |
| Bourbon | Kate Edgar | Paris. |
| Caldwell | Nannie R Catlett | Princeton. |
| Carroll... | Lucia Smith --- | Carrollton. |
| Christian | Katie McDaniel | Hopkinsville. |
| Crittenden | Mina Wheeler | Marion. |
| Franklin | Lucy Pattie | Frankfort. |
| Garrard | Eliza J. Lusk. -- | Lancaster. |
| Hopkins. | Sallie R. Brown .-.... | Madisonville. |
| Jeferson | Rosa A. Stonestreet | Louisville. |
| Montgomery | Mary G. Anderson | Mount Sterling |
| Muhlenberg | Nannie Jones .-... | Greenville. |
| Pendleton | Hattie Orr | Falmouth. |
| Robertson | Kate Zollar | Mount Olivet. |

MICHIGAN.


Flora McLauchlin
Julia Inglis
Flora M. Marvin
Kate Borden
Nettie C. Gray
Retta Peet
Mrs. L.E. W.Hail
Vesta B. Smith

Grand Marais.
Au Gres.
Grayling.
Gladwin.
Traverse City.
Ithaca.
Manistee.
Shelby.

MINNESOTA.

| Aitkin | Mrs. D. W. Harper | Aitkin. |
| :---: | :---: | :---: |
| Becker | Mary A. Hansoln | Detroit. |
| Eenton | Mary Brett | Sauk Rapids. |
| Carver | Matilda A. Ochs. | Chaska. |
| Cass... | Mrs. E. N. Cadey | Pillager- |
| Itasca | Hattie F. Booth | Grand Rapids. |
| Jackson | Mrs. Lanra T. Olson | Jackson. |
| Lake | Carrie H. Woodward | Two Harbors. |
| Lyon. | Mrs. Dell W.Forbes | Marshall. |
| Mower | Fannie G. Gies .-... | Austin. |
| Ottertail | Christine Goetzinger | Fergus Falls. |
| Rock | Ellen M. Wright ... | Luverne. |
| Sherburno | Bird Craig | Orrock. |
| Yellow Medicine | Mary F. Hall | Wood Lake. |

## MISSOURI.

| Atchison. | Miss Hattie D. Sutton | Rockport. |
| :---: | :---: | :---: |
| Clark | Mrs. Rowena Carter | Chambersburg. |
| Howell | Mrs. Carrie Phelps | West Plains. |
| Linn | Miss Josephine Baker | Marceline. |
| Mercer- | Miss Millicent Griffith | Modena. |
| Newton Pike | Miss Louise Hendrex-- | Neosho. |
| Pike Ripley | Miss Willa N. Mitchell | Douisiana. |
| Schuyler | Mrs. Belle Bunch | Lancaster. |
| Scotland | Miss Arminta B. Nerry | Memphis. |

NEBRASKA.

| Banner | Mrs. W. E. Heard | Harrisburg. |
| :---: | :---: | :---: |
| Blaino | Mrs. F. T. Miner | Dunning. |
| Brown | Estella M. Daniels | Ainsworth. |
| Chase | Ida M. Kelly | Champion. |
| Cherry | Etta Brown | Valentine. |
| Dixon | Mary McKinley | Ponca. |
| Frontier | Mrs. Clara L. Dobso | Stockville. |
| Gosper. | Maud M Johnson | Elwood. |
| Grant--... | Mrs. R. M. Moran | Hyannis. |
| Hitcheock | Mrs. Stella Smith | Trenton. |

Women county superintendents, 1809-1900-Continued.
NEVADA.

| County. | Name. | Post-office. |
| :---: | :---: | :---: |
| Lincoln | Annie B. Clinton. | Pioche. |

## MONTANA.



NEW YORK.

| Cattaraugus | Christina McLennan | Franklinville. |
| :---: | :---: | :---: |
| Cortland... | Katharine E. Cobb. | Truxton. |
| Herkimer | Minnie A. Wooster | Newport. |
| Lewis. | Ottilia M. Beha | Constableville. |
| Madison | Marie Cooper | Canastota. |
| Niagara | Adalaide L. Harris | Ransomville. |
| Oneida. | Cora A. Davis | Whitesboro. |
| Steuben | Lillian E. Ostrander | Kanolla. |
| Suffolk. | Millard H. Packer | Say ville. |
| Tompkins | Libbie J. Sweetlan | Dryden. |
| Washington | Myra L. Ingalsbe | Hartiord. |
| Westchester. | Bertha E. H. Berbert | Hastings upon Hudson. |

NORTH DAKOTA.

| Billings | Mrs. Rachel Denniston | Medora. |
| :---: | :---: | :---: |
| Bottineau | Miss Mary M. Carey | Bottineam. |
| Burleigh. | Fannie Dunn | Bismarck. |
| Cass. | Mrs. Mattie M. Davis | Fargo. |
| Eddy. | Mrs. Grace B. Putnam. | New Rockford. |
| Griggs | Clara Feiring | Cooperstown. |
| Kidder | Miss Manie Portner | Steele. |
| Pierce. | Matilda Peterson. | Pugby. |
| Stark | Miss Delia Spears. | Dickinson. |
| Wells | Josephyne M. Paulsen. | Fessenden. |

SOUTH DAKOTA.


Elsie Malcolm
Emily Meade
Carrie E. Daily
Mary L. Reed.
Miss A. B. Halverson


Bellefontche.
Bartoldi.
Vermilion.
Pringle.
Webster.
Clearlake.

SOUTH DAKOTA-Continued.

| County. | Name. | Post-office. |
| :---: | :---: | :---: |
| Fall River | Emily A. Black | Hot Springs. |
| Faulk ... | Isabel F. McCoy | Faulkton. |
| Gregory | Latta Bailey | Fairfax. |
| Hawhes | MaudeR. Carter | Pierre. |
| Lawreade | Susie Bird ...... | Deadwood. |
| Miner | Nellie C.Lyons | Carthage. |
| Moody | May Earre! | F'landreau. |
| Pennington | Mrs. L. A. Fell | Rapid City. |
| Pocter | Mary McLean | Gettysburg. |
| Stanley | Nellie A. Dougla | Fort Pierre. |
| Suily . | Eimma Nelson | Oniüa. |

OHIO.

| Greene <br> Henry | Mrs.E.H. Carruthers. <br> Mis. Sue Welsted....... | Xenia. <br> Napoleon, |
| :---: | :---: | :---: |
| OKLAHOMA. |  |  |
| Beaver | Miss Cortha Kagay | Beaver City. |
| Blaine | Nancy Carver Mille | Watonga. |
| Greer | Laura Moore - .-. | Mangum. |
| Noble | Miss Bertha Ryan | Perry. |
| Oklahoma | Mary D. Couch. | Oklahoma City. |
| Pottawatomie | Alice Shelton . | Tecumseh. |

PENNSYLVANIA.

| Cameron. |  | Driftwood. |
| :---: | :---: | :---: |

TENNESSEE.

| Bledsoe | Miss Lilly M. Henry | Pikeville. |
| :---: | :---: | :---: |
| Cannon | Miss Ina B. Smithson | Woodbury. |
| Franklin | Miss Mattie Arledge | Winchester. |
| Hamblen | Miss Ida Johnson | Morristown. |
| Henry --. | Mrs. Annette Watters | Paris. |
| Ruthorford | Miss J. M. King | Murfreesboro. |
| Shelby | Mrs. Lyde P. Thoma | Memphis. |
| Union | Miss Nola Harless | Luttrell. |

UTAH.

| Garfield. | Jane Le Fever | Panguitch. |
| :---: | :---: | :---: |
| Kane | Mris. Marinda Halliday | Kanab. |
| San Juan | Miss Lillian Decker..... | Bluff City. |

VERMONT.

| Grand Isle ... | Mrs. Leonora E. Marvin .. | Alburg. |
| :---: | :---: | :---: |

## WASHINGTON.

| Douglas. |
| :---: |
| Gariteld |
| Island. |
| Lincoln |
| Mason.- |
| Pacific |
| Skagit |
| Skamania |

Miss Sevilla Steiner Mrs. Emma Elsensohn
Miss Laura G.Plummer
Alice Neal
Mrs. H. Minnie Decker
Mrs. Ada M. Harris
Susan Lord Currier
Lillie Miller

Waterville. Pomeroy. Coupevilie. Davenport. Shelton. South Bend. Mount Vernon.
Washougal.

Women county superintendents, 1893-1900-Continued.
WISCONSIN.

| County. | Name. | Post-office. |
| :---: | :---: | :---: |
| Bayfield. | Jessie N. Smith | Washburn. |
| Burnett. | Mrs. Fay S. Williams. | Grantsburg. |
| Chippewa | Anne E. Schaffer-..... | Chippewa Falls. |
| Douglas. <br> Marcuett | Mrs. Jennie Richardson Ellen Hammond | Lake Nebagemain. |
| Oneida | Myra Germond. | Rhinelander. |
| Pepin. | Mary Olson | Porcupine. |
| Price. | Mrs. Elizabeth Fordyce | Phillips. |
| Sawyer | Mrs. Effie Harrington. | Hayward. |

WYOMING.

| Albany | Mrs. Caira M. Simpson | Laramie. |
| :---: | :---: | :---: |
| Carbon | Gertrude M. Huntington | Saratoga. |
| Crook | Beasie Moodie. | Sundance. |
| Fremont | E. Lena Wadsworth | Lander. |
| Johnson | Clara L. Moeller | Buffalo. |
| Laramio. | Mrs. Elizabeth Hawes | Cheyenne. |
| Natrona | May Hamilton | Casper. |
| Sheridan | Dora Kirby ...- | Sheridan. |
| Uinta - ...... | Nellie Pepper...... | Evanston. |
| Weston | Ella Menderson | Newcastle. |

Women on school boards of cities of over 100,000 inhabitants.

| City. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

[^148]BENEFACTIONS FOR 1899-1900.

| Classes of institutions. | - | Number of institutions receiving benefactions. | Amounts. |
| :---: | :---: | :---: | :---: |
| Universities and colleges. |  | 205 | \$10, 840, 084 |
| Colleges for women: |  |  |  |
| Division A |  | 11 | 3\%4,352 |
| Division B...- |  | 32 | 264,214 |
| Schools of technology |  | 7 | 566, 813 |
| Schools of theology --- |  | 53 | 1,123.802 |
| Schools of law --.....- |  | 3 | 105,500 |
| Schools of medicinea |  | 12 | 55, 439 |
| Public normal schools |  | 8 | 345, 733 |
| Private normal schools |  | 16 | 487, 789 |
| Public high schools. |  | 69 | 39, 003 |
| Private high schools. |  | 178 | 913,832 |
| Total |  | 644 | 15, 066,561 |

$a$ Including 1 school of dentistry, $\Omega$ of pharmacy, and 1 of veterinary surgery.
Benefactions to educational institutions, 18\%1-1900.

| 1871 | \$8, 593,740 | 188i-S8 .-.--.-.-......... - \$6, 646, 368 |
| :---: | :---: | :---: |
| 1872 | 10, 072,540 | 1888-89 ..............-...-. $6,942,058$ |
| $18 \% 3$ | 11, 225,977 |  |
| 1874 | 6, 053, 804 | 1890-91 .................. $\alpha 8,519,233$ |
| 1875 | 4,126,562 | 1891-92 ....-...-..........- $a$ 8, 721,902 |
| $18 \% 6$ | 4,691, 845 | 1892-93 ..........-.....-.- $\quad$ a $8,207,690$ |
| $18 \% \%$ | 3, 015, 256 | 1893-34 -.-.-.-.---------- $a$ - $10,855,365$ |
| $18 \% 8$ | 3,103, 289 | 1894-95 ..-................ $b 8,240,876$ |
| 1879 | 5, 249, 810 | 1895-96 .-.-.............. - $611,677,048$ |
| 1880 | 5, 518,501 | 1896-97 -.-...............-. - $610,049,141$ |
| 1881 | 7,440, 224 | 1897-98 -................... $b$ b $10,981,209$ |
| 1882-83 | 7,141, 363 |  |
| 1883-84 | 11, 270,286 | 1899-1900 ......-. . . . --. - - b15, 066, 561 |
| 188!-85 | 9, 314, 081 |  |
| 1885-86 | 5.976,168 | otal for thirty y |
| 1880-8\% | 「7,512, 910 |  |

[^149]
## SUMMARY OF LAWS RELATING TO COMPULSORY EDUCATION AND CHILD LABOR IN THE UNITED STATES. ${ }^{1}$

[Issued by the Chicago Association of Collegiate Alumnæ, February, 1901.]
The compulsory education law of Illinois requires children between the ages of 7 and 14 years to attend school for sixteen weeks during the year. The Illinois child-labor law forbids the employment for wages of children under the age of 11 years. The joint operation of these laws makes it possible for children who have complied with the school requirement of sixteen weeks' attendance, but who are without proper home restraint, to spend their time on the streets for the rest

[^150]of the year. Since they may not work and need not go to school, they are necessarily left to the demoralizing influences of idleness, often under vicious surroundings. The effect of such a life on children in a great city is shown in the statistics of juvenile crime. Mr. Riis has said: "Three-fourths of all juvenile delinquency in New York is the result of truancy, the street life of children."

A similar assertion might be made of Chicago. The discrepancy between the compulsory education and child-labor laws, which is in part responsible for the present state of things in Illinois, has become the subject of serious consideration on the part of many persons interested in juvenile reform, among them some of the women's clubs of this city and State. A lengthening of the compulsory school term (at least in cities), so that the school period will correspond more nearly with the period during which employment is forbidden, seems to be the remedy needed. The citizens' educational commission of the civic federation has passed a recommendation for an increase of the compulsory school term from sixteen weeks to twenty-six weeks, and it is expected that this recommendation will be embodied in a bill which the commission is to preseat to the legislature this winter.

In view of the fact that conflicting opinions are held as to the details of the proposed legislation, it bas been thought that a comparative study of such legislation in other States might prove helpful. The accompanying table has accordingly been prepared. By reason of the close connection bstween the two subjects, the main points of the child-labor laws in States having such laws have been inciuded with the provisions on compulsory education.

Madeleine Wallin Sikes, Chairmair Committee on Educational Legisistion.

| CHILD LABOR. ${ }^{1}$ |  |
| :---: | :---: |
| Age under which specified em- <br> ployments are forbidden. | Educational restrictions on child |
| labor. ${ }^{2}$ |  |

Children under 16 years, unable to read and write, may not be em
ployed in mines. Children under 14 years, unable to read or write, may no be em school hours unless they have riod during the year; under 16, not be employed in mines.

 Children under 16, unable to read

 vating works, oakery, or print
ing office. Certificate of age
required under 16.
12 years, in mines (boys) COMPULSORY RDUCATION.
Penalty on parents for neglect.
$\$ 1$ to $\$ 5$ and costs; stand commit-

| Annual period. |
| :---: |
| 16 weeks; 6 consecutive. Time |
| to commence with beginning |
| of first term of school year |
| for pupils under 10 years of |
| age, and not later than De- |
| cember 1 of said year for pu- |
| pils over 10. |



|  | 回 |  |  | 1 0 0 0 0 0 0 0 0 | + |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Same as Arkansas; and must have year
Children under 14 must not be employed in foregoing employments, or in clothing, dress-
making, or millinery establish-
ments, nor by itinerant musicians, noless ther have attended school 4 months in preceding
children under 15 shall not be employed in any manufacturing or cept during vacation, unless
the have attended school 16 weeks during preceding year.
Such school attendance must
 Children under 14 (see preceding column); over 14, who can not be employed where there is an evening school unless they at-
tend the same. Children under 16, unable to read and write, may not be employed
in manufacturing estabiishments.
12 years, in coal mines
Constitution requires la
Constitution requires laws fixing "places dangerous to life or health, or injurious to morals.
No such laws are found. 12 years (boys), 14 (girls), in any
factory, warehouse, or workshop.

1. years, in any manufacturing Certificate of age requiived un-
der 16 . Under 15 , this certifider 16 . Under 15 , this certifiance.
12 years, in mills and factories (except canning establishments)
16 counties exempt from law. Law applies to shops and mer--
cantile establishments in Baltivears in factories, workshops or mercantile establishments; 14, in any other employment for wages during school hours: liquors (except in drugstores).
Certificate of age required un-
der 16 .
4 years, in manufacturing estab1 years, in manufacturing estab
lishments. Certificate of age required under 16. (Law ủoes
not apply to canning or evaporating works).
First, $\$ 5$ to $\$ 10$; subsequent, $\$ 10$
to $\$ 20$ 8-14 | 12 weeks; 6 consecutive............
Kansas ................-
Kentucky ...........
Louisiana ...........

Maine
Maine

## Maryland

Michigan
${ }^{1}$ No attempt has been made in this table to note the States regulating the hours of labor of minors where labor is permitted. Such regulations are now very general, exceptions being some of the extreme western states and the southern States generally. illinois prohibits more than sixty hours of labor in any one ${ }^{2}$ Statistics on this subject in the report of the Industrial Commission, from which this table was compiled, are not complete for all the States. The provisions ${ }^{3}$ This certificate must contain: Name, place, and date of birth of child; in New York and Massachusetts and some other States, a statement of school attend${ }^{4}$ Not applicable to children over 14 lawfully employed and not enrolled at school. ${ }^{5}$ To 16 , if wandering about public places without lawful occupation.

Children under 16 （provisions sim－ liar to Massachusetts）；but chil can read and write English may be employed in factories and mercantile establishments，re without complying with the school requirements in other respects．
Children under 14 may not be em－ ployed in any manner during attended school 12 weeks during Boys under 15 and girls under 16 may not be employed during
school hours（household work Children under 16 may not beem－ ployed in the foregoing＂or ments，unless they can read tended school 16 weeks in pre－
Children under 15 （provisions sim－
ilar to Maine and Massachu－ ilar to Maine and Massachu－
setts）． Same as North Dakota．
Same as North Dakota．
Children under 14 （provisionssim－
ilar to Maine and Massachu－
setts）．



 Under 21，may not be employed of legal guardian． 12 years，in mines，factories，and
worikslops（constitution of
State）．
迫的 turing or mercantile indus－
tries，laundries，workshops，
 offices： 14 years in mines（boys）；
girls may not work in mines； 12 years，in bituminous mines． der 16.
12 years，in factories，manufac－ turing or mercantile establish－ ments．Certificate of age re－
quired under 16 ．
14 years，in mines．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．
12 years，in worikshops，mills，fac－ 14 years，in mines（constitution of State）；girls may not work 10 years，in manufacturing or
mechanical establishments．
 theatrical exhibitions，etc．
2 Not
North Dakota．

$\$ 5$ to $\$ 20$ ，or penal bond of $\$ 100 ;$ on to 30 days．
First，$\$ 5$ to 825 ；subsequent，S．
First，not exceeding $8 \%$ ；suluse－
quent，not exceeding $\$ 5$ ．
 16 weeks； 8 consecutive，other
districts． ween 14 and 16 ．保
New York．．．．．．．．．．
North Carolina ．．．
North Dakot\＆．．．．．
Ohio ．－．．．．．．．．．．．．．．．－
Oregon ．．．．．．．．．．．．．．．．

| COMPULSORY EDUCATION. |  |  |  | CHILI LABOR. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State. | Age. | Annual period. | Penalty on parents for neglect. | Age under which specified employments are forbidden. | Educational restrictions on child labor. |
| Washington.-....- | $18-15$ |  | $\$ 10$ to $\$ 25 ;$ defective children, $\$ 50$ to \$200. | 14 years, in mines (boys); girls may not work in mines. | Children under 15 may not be employed in manufacturing, mechanical, or mercantile establishments, or by telegraph or telephone companies (except in vacation) unless they have attended school a prescribed period the previous year, or have attained reasonable proficiency in common branches. Such attendance to continue during employment). |
| West Virginia. .... | 8-14 | 16 weeks -----.--------------------- | First, $\$ 2$; subsequent, $\$ 5$ | 12 years, in mines, factories, workshops, manufactories, or establishments where goods or wares are manufactured. |  |
| Wisconsin....-...- | ${ }_{7}^{7}-13$ |  |  | 14 years, in mines, factories, or workshops; 14 years, in mercantile establishments, laundries, or in telegraph, telephone, or public messenger service, except in vacation of public schools. Certificate of age required under 16 (but county judge, commissioner of labor, factory oz assistant factory inspector may exempt any child over $1: 2$ from this act, where labor is necesssry to support). |  |
| Wyoming $\qquad$ United Stateslaws (for Territories). | 26-21 |  | Not exceeding \$25.-.-.....------.-. | 14 years, in mines (constitution of State); girls may not work in mines. <br> 12 years, in the underground workings of any mine. |  |

## FREE TEXT-BOOKS.

The following extracts from the laws of the varions States regarding free textbooks are taken from Chapter XIX of the Report of the Commissioner of Edncation for 189\%-98:
In certain States the text-books are regularly furnished free to pupils. These, with the units bearing the expense, are Delaware (district), District of Columbia (below high schoois), Idaho (district), Maine (town), Maryland (county), Massachusetts ( $\begin{gathered}\text { own), Nebraska (district), New Hampshire (town), New Jersey }\end{gathered}$ (school corporation), Pennsylvania (school corporation), Rhode Island (town).
In New York (rural) district boards furnish indigent pupils; (union school district) boards of education are authorized to furnish books "to pupils out of any money provided for the purpose," but no mode of providing money is indicated.
In the following States, where books are usually individual property, local authorities have legal sanction for supplying the use of books free to indigent pupils, obligatory in all except Illinois and Missouri, where it is permissive: California (district); Illinois (district); Indiana (township); Kentucky (comnty); Missouri (district); Montana (district), Nevada (district); New Mexico (district); Virginia (district); Washington (district).

In certain States free text-books are furnishsd irregularly on local popular votelocal option, as it might be called. These are Colorado (district); Connecticut (town); Iowa (district); Kansas (district); Michigan (district); Minnesota (district); North Dakota (district); South Dakota (district); Vermont (town); Wisconsin (district).

Particulars for the individual states mentioned are as follows:
California, 1895.-By law of 1895 and authorization of later laws, the State board of education, consisting of the governor, State superintendent, and principals of State normal schools, has compiled, or caused to be compiled, for the common schools these text-books: Readers, spellers, arithmetics, grammars, United States histories, geographies, text-books on physiology and hygiene, inciuding a system of gymnastic exercises, and special instructions as to the nature of alcoholic drinks and narcotics and their effect upon the human system.

Whenever any one or more of the State series of school text-books shall have been compiled and adopted, the State board of education shall issue an order requiring the uniform use of said book or books in the common schools of the State, * * * and no school board or other school authority in this State shall have the power to authorize the use of any * * * books as text-books other than those directed to be used by the order aforesaid of such State board, except books on such subjects as are not provided for by text-books published by the State.

The printing of these text-books is done under the superintendent of State printing at the State printing office.

All orders for text-books are to be made on the superintendent of public instruction, accompanied by cash in payment at the price fixed by the State board of education as the cost price at Sacramento, and the cost of postage if to be shipped by mail.

The following persons are entitled to order books:
(1) County superintendents of schools for the use of teachers, parents, and pupils in their counties only.
(2) Principa's of State normal schools for their (use) and for the use of the pupils in their respective schools only.
(3) The secretary or clerk of any school district in the State for the use of the pupils in such district only; but no books ordered by the county superintendents or clerks of district boards of trustees or principals of normal schools shall be sold
at a price exceeding the cost price at Sacramento, with the actual cost of freight and cartage added.
(4) Any retail dealer who first transmits to the State superintendent of public instruction an affidavit pledging himself not to sell the books to be sold again, or to any person beyond the limits of the State, or at a price exceeding the price to the pupil fixed by the State board of education.

The boards of supervisors of the counties are required to provide a revolving fund to enable the county superintendent to purchase the State text-books; all moneys talken therefrom to be replaced by the moneys received from the sale of books by himself, teachers, or clerks of boards.

All schoolboois compiled by the State must be furnished to the public school children of the State at the cost of printing, publishing, and distributing the same, the cost of distribution taken to be the cost of postage required for mailing each book. (Act of 1887.)
School boards must furnish books for the children unable to purchase them, the books remaining district property and kept in the district library when not in use.

Illinois, $189 \%$.-The district directors determine what branches of study shall be taught and what text-books be used, and they are required to enforce uniformity and permit no change oftener than once in four years. They have power to purchase, at the expense of the district, text-books to supply indigent children by loan.

Indicna, 189\%.-Tho State board of education, consisting of the governor, State superintendent, presidents of the State university, Purdue University, the State normal school, and superintendents of schools of the three largest cities, was anthorized in 1889 to invite proposals: (1) From publishers for furnishing books to the school trustees of the State for a term of five years; (2) from authors who have unpublished manuscripts; (3) from parties ready to undertake the compilation of the required books.

The subjects prescribed were: Spelling, reading, arithmetic, geography, English grammar, physiology, history of the United States, and a graded series of writing books.

Books are suppiied under contracts with publishers.
The State is expressly protected from any liability to the contractors, who receive their pay solely from the proceeds of sales upon a plan as follows: Every school corporation certifies to the comnty superintendent (appointed by township trustees of the several townships) the number of the respective books required in its schools. The county superintendent makes requisition upon the (elected) State superintendent, who makes requisition upon the contractor, who within ninety days ships the books to the county superintendent. The latter notifies the local trustees, who take the books certified by them as needed and furnish them to the school patrons or school children of the corporation at the contract price for cash only, except that the corporation furnishes necassary books to indigent children, who would otherwise be unable to attend school. Any child 3 to 21 years of age, and any parent, guardian, or teacher of such child, may buy at contract price from the county superintendent, who malses separate requisition on the contractor for these books.

Kentucly, 1896.-The county board of examiners, consisting of the county superintendent in each county, fixes a list, with publisher's guarauty, not to be changed for five years. Penalty for accepting anything of value for influencing choice, fine of $\$ 500$ and removal from office; for offering it, fine of $\$ 500$.

The (eleoted) county superintendent ascertains from trustees and teachers and otherwise the number and cost of text-books in each branch needed by indigent children in the county, and on his report to the county judge the latter is required to purchase them from an aliowance, not to exceed $\$ 100$ per annum in any county, and turn them over to the county superintendent for distribution.

Missouri, 189\%.-The State anditor, attorney-general, (electod) superintendent of public instruction, president of the State normal school at Kirksville, and one
practical public-school teacher appointed by the governor constitute a schoolbook commission.

This commission, upon bids submitted, made contracts for books to be supplied for five years from September 1, 1897, to be used exclusively after September 1, 1898.

The books are furnished through dealers or by mail at guaranteed prices: (1) contract; (2) retail; (3) mailing.

Any director or board of directors permitting any other text-book to be used in the same branches and the same grades as the contract list is deemed guilty of a misdemeanor and is subject to a fine of $\$ 5$ to $\$ 25$ for each offense; but supplemenfary reading may be used when furnished without expense to pupils and without displacing any contract book.
Districts furnish indigent children from the contingent fund.
The act does not apply to cities having a population of 50,000 or over.
Moniana, 1895.-The State board of education, consisting of the governor (elected), State superintendent of public instruction, attormey-general, ex-officio members, and eight appointed by the governor, recommends to the legislature a uniform series of text-books to be used in the public schools below the high schools.

The State superintendent prepares lists of publications suitable for school libraries, with prices. He prescribes a course of study for all public schools.

Local school boards provide books for indigent children; require all pupils to be furnished with suitab'e books as a condition of membership in school; determine what branches shall be taught additional to those required by law, subject to approval by the (elected) county superintendent.

Nevada, 189\%.-The State board of education, consisting of the governor (elected), superintendent of public instruction, and president of the university, prescribes a uniform series of text-books in the principal studies pursued in the public schools, including temperance lessons, not to be changed oftener than once in four years. Text-books in algebra, geometry, drawing, natural history and philosophy, astronomy, and elements of bookkeeping are prescribed, as well as those for common English branches.

Penalty for failure to use the books of the list is forfeiture of the district's share of public-school moneys.

The boards of school trustees furnish indigent children, holding the books as district property.

New Mexico, 1895.-The Territorial board of education, consisting of the governor and the presidents of the university at Albuquerque and the Agricultural College at Las Cruces, is empowered to adopt a system of schoolbooks for exclusive use in the public schools of the Territory. It has power to contract with publishers, through the superintendent of public instruction (appointed by the governor, by and with the advice and consent of the council), for purchase and delivery of books.

The books purchased in the name of the Territory shall be sold to the counties for cash only, at cost and freight, with $\check{0}$ per cent added for necessary expenses. Accounts are settled by the superintendent of public instruction on the 10th of each month, and a full settlement is made between the Territory and contractors semiannually, March 1 and September 1. No change is to be made for four years from adoption. Penalty: Any teacher, school officer, or county superintendent violating the rules of the board is deemed guilty of a misdemeanor, and is subject to a fine of from $\$ 10$ to $\$ 100$. Indigents are furnished with books by district boards.

Ohio, 1897.-A commission, cunsisting of the governor, secretary of state, and (electedu) State commissioner of common schoo's, fixes maximum prices on books offered through proposals filed in the office of the commissioner of common schools and confirmed by agreement for five years. It is unlawful for any board of education to adopt or cause to be used any book not filed as above.

Publishers failing to maintain the supply as provided are to have the book in question permanently rejected and to pay $\$ 500$ for each failure, which sum is to go to the common-school fund of the State.

The State commissioner of common schools in the first half of June, annually, notifies boards of education regarding the publishers whose guaranties are filed. On the third Monday of August, or at an adjourned meeting within two weeks, each board elects the studies to be pursued and the books to be used in the schools under its control. No text-book so adopted is to le changed, nor any part altered or revised, nor any other text-book substituted for five years from adoption without consent of three-fourths of the members elected given at a regular meeting.
Each board, at regular meetings in April and August, is to determine the kind and number of books required in its schools for next six months, and cause an order to be drawn for the amount in favor of the clerk of the board; the clerk then orders the books from the publisher, the board paying transportation charges from the contingent fund.
The board has authority to arrange for the care and sale of the books to pupils of school age at not exceeding 10 per cent advance on the cost. The board nay contract with local dealers to furnish books at rates above indicated, the board being responsible to the publishers for all books purchased by the board. When pupils remove from any district to a district using other books, and wish to dispose of their books, the board of the district from which they remove is authorized to purchase their books at a fair valuation and resell them. The local board furnishes indigent pupils by loan.

Virginia, 1892.-Uniformity of text-looks and the furnishing of schoolhouses with such apparatus and library as may be necessary shall be provided for on some gradual system by the (State) board of education. The two works of John Esten Cooke, entitled, respectively, Virginia; A History of Her People, and Stories of the Old Dominion, shall be included in the list of text-books.
The State board of education, consisting of the governor, superintendent of the public instruction (elected by the general assembly), and attorney-general, made contracts with publishers by which a series of books became established for four years from August 1, 1894. The board prescribed that counties and cities could change during the four years from other books in use, but must keep the newly adopted books four years from adoption, if continued so long on the list of the board. Every pupil is required to be supplied with proper books before admission to auy schcol. City and county superintendents (appointed by the State board of education and confirmed by the senate) are charged with securing arrangements for having supplies of the adopted books within easy reach at stipulated prices.
School districts provide books for indigent pupils.
Washington, 1893.-The State board of education, consisting of four suitable persons, two being teachers in the common schools, appointed by the governor, by and with the advice and consent of the senate, together with the superintendent of public instruction, is authorized to adopt a uniform series of books for the common schools, not to be changed for five years except on failure of publishers to comply with their contract.

City boards of education may adopt books additional to those prescribed by the State board, but make no changes within five years of adoption, and they provide books for indigent children.
All children are required to be supplied with the prescribed books as a condition of membership in the schools.

Any district using text-books other than those prescribed, or failing to comply with the course of study prescribed by the board of education, forfeits 25 per cent of its school fund for that year.

STATES IN WHICH SCHOOLBOOKS ARE, OR MAY BE, PUBLIC PROPERTY.
In the following States provision is made, obligatory or permissive, for furnishing the use of text-books free to pupils, for sake of brevity called free text-books.

Colorado, 1893.-Each school board $* * *$ shall have power, and it shall be their duty, * * * to fix the course of study, the exercises, and the kind of textbooks to be used: Provided, That but one kind of text-book of the same grade or branch of study shall be used in the same department of a school, and that after the adoption of any book it shall not be changed in less than four years, unless the price thereof shall be unwarrantably advanced or the mechanical quality lowered or the supply stopped.

To provide books for indigent children, on the written statement of the teachers that the parents of such children are not able to purchase them, and to furnish free text-books for the use of all pupils when arthorized to do so by a majority vote of the district as expressed at any regular or special meeting.
To require all pupils to be furnished with the proper and suitable boois as a condition of membership in school.

Connecticut, 1895.-The State board of education, consisting of the governor, lieutenant-governor, and four persons appointed by the general assembly, may direct what books shall be used in all its (State) schools, but shall not direct any book to be changed oftener than once in five years. (Sec.10.)

Any town, at its annual meeting, may direct its school visitors or board of education or town committee to purchase, at the expense of said town, the textbooks and other school supplies used in the public schools of said town, and said text-books and supplies shall be loaned to the pupils of said public schools free of charge. (Sec. 53.)

Delaware, 1893.- By the Jaw of 1885 the State board of education, now composed of the governor, secretary of state, and the three superintendents of the counties appointed by the governor, meets every five years to determine what changes shall be made in the text-books to be used in the said free schools, and no change shall be made in any text-books to be used in the said free schools except at the meetings to be held every five years as directed by this act.
By act of 1891, on and after the first Saturday in April, A. D. 1891, the school commissioners or trustees of each school district or districts in the State shall furnish the necessary text-books free to all the pupils enrolled in the free schools of the State in the manner hereinafter provided.
The school commissioners or trustees shall order from the publisher or publishers the books which have been adopted by the State board of education at the net contract prices at which the publishers have agreed to supply the same. (Sec. 2.)

It shall be the duty of the clerk of each school district to distribute the books received to the scholars or their parents, guardians, or other person, as they desire, upon receipt for the same. The clerk shall be responsible for the safe-keeping of the books furnished him and also for prices of books sold. (Sec.3.)
It shall be the duty of the school commissioners to provide for the safe-keeping and care of the books returned by the pupils at the close of the annual term to the clerk. The school commissioners may furnish books at cost to pupils who wish to replace books lost or willfully destroyed or who may wish to own their books, and shall turn the proceeds into the school fund of the district. (Sec.4.)
It shall be the duty of every teacher to hand to the commissioners of the district, at the end of each quarter, an inventory of the books in the school belonging to the district, stating by whom such books are held, their condition, and the number of and by whom bonks have been destroyed. Until such report shall have been made it shall not be lawful to pay such teacher his or her salary. (Sec. 5.)

The text-books for the colored schools of the State shall be ordered by the county superintendents of the respective counties through the county treasurer of each county. (Sec.7.)

District of Columbia, 1898. -In recent years books have been supplied by loan, free, to pupils below the high schools throngh specific appropriations made by Congress, upon which the District depends for its legislation.

Idaho, 189\%.-A State board of text-book commissioners, consisting of the president of the university, the State superintendent of public instruction, and three others engaged in educational work, appointed by the governor, after proposals for furnishing books, free on board cars, were received for a term of six years from September 1, 1893, selected a series of boozs for exclusive use in the State.

The chairman of each board of trusteas in a county forwards to the (elected) county superintendent a list of the books needed. The county superintendent makes the necessary orders to the State superintendent, who orders from the contracting publishers and, on receipt, distributes to the county superintendents. All payments to county superintendents are forwarded to the State treasurer, who is charged with seitlement of bills of contractors.

By amendatory act of 1897 the trustees purchase, at the expense of the district, all text-books used in the public schools, to be either loaned to the pupils free of charge or sold at cost to any pupils of the district for cash only. The clerk is custodian and must deposit a detailed monthly statement of accounts and of the condition of books.

Iowa, 189\%.-The board of directors of each school corporation is empowered to adopt text-books for the teaching of all branches taught, and to contract for and buy said books and to sell the same to the pupils of their respective districts at cost. The board may select one or more persons within the county to keep said books for sale, under bond. All the books purchased under the provisions of this chapter shall be paid for out of the contingent fund.

The bools are selected after advertisement for proposals. Contracts are made for tive years. The publishing contractors give bonds.

The (elected) county superintendent, the county auditor, and the members of the board of supervisors constitute a county board of education. On petition of one-half the school directors of a county, outside the cities and towns, asking for a uniform series of text-books in the county, the board provides for submitting the question of county uniformity of text-books to the electors at the next annual meeting. If a majority of the electors voting vote affirmatively, the county board selects the text-books for the entire county and contracts for the same. The list adopted is obligatory upon ali public schools of the county except in the cities and towns, which may adopt the same books if they so choose. The board of education may arrange for depositories and pay for the books out of county funds, to which proceeds of sales are returned. On petition of one third or more of the legal voters in any school corporation the question of providing free text-books is submitted to the voters at the annual meeting, notice thereof being in the call for the meeting.

If a majority of the legal voters present and voting favor it, the board procures the books, by selection and contract as above, and loans them to pupils, who are held responsible for damage or loss, but are permitted to buy any text-books used in the school at cost. The electors, by like steps, can secure the discontinuance of loaning text-books to pupils.

District boards may furnish school books to indigent children when they are likely to be deprived of the proper benefits of school unless so aided.

Kansas, 189\%.-A school text-book commission of eight members, appointed by the governor, by and with the consent of the senate (not more than three members being of the same political party), with the State superintendent ex officio chairman, foi four years from the first Monday in April, 1897, was authorized to select and adopt a uniform series of school text-books for use in the public schools in the
following-named branches: Spelling, reading, arithmetic, geography, English grammar, physiology and hygiene, history of the United States, civil government, elements of algebra and physical geography, elements of natural philosophy, bookkeeping, and a graded series of writing books.

Bids were invited from pablishers for furnishing books for five years from September 1, 1897; also from authors of unpublished manuscript; also from persons willing to compile books. The law defines the maximum prices and provides for exchanges to secure uniformity.

After the annual school meeting each clerk is required to transmit an estimate of books required to the county superintendent, who sends a reauisition on the publishers for books needed for the courty. By a two-thirds majority of the legal electors any board may buy the necessary books from the incidental funds, retain the ownership, and furnish the use free to pupils.

Maine, 1895.-Towns shall provide schoolbooks for the use of the pupils in the public schools at the expense of said town: Provided, however, that any parent or guardian of any pupil in the public schools may, at his own expense, procure for the separate and exclusive use of such pupil the text-books required to be used in such schools.

Maryland, 1896. -Schoolbooks shall contain nothing of a sectarian or partisan character.

The board of public school commissioners of Baltimore City and each beard of county school commissioners shall adopt and purchase text-books for use in the public schools of said city and of the several counties in the State as such new text-books are required, and when so procured the necessary text-books shall be furnished free of cost for use in the public schools of the State, subject to the order of said boards, but said boards shall have the right at any time to change any scries of text-books already in use or hereafter adopted; provided, that text-books shall be furnished under the provisions of this act to the several grades in the public schools successively, beginning with the first grade; and provided, that said boards shall not be require 1 to expend during any school year for said textbooks more than the several amounts of money received by said boards, respectively, under the provisions of this act; and provided, that indigent pupils of all grades shall receive text-books free of cost, as provided under the provisions of existing laws; and provided, the said respective boarls shall adopt such means for the purchase of text-books by competitive bidding, as far as is practicable, and at the lowest possible price; and provided, that parents or pupils may purchase their own text-books when they think proper. The details of titles, publishers, and prices are reported to the State board of education and set forth in full in its anntal report.

The said several boards shall provide for the issuing, safe-keeping, care, and return of the same.

Massachusetts, 1895.-Chapter 103 of the acts of $188 \pm$ provides that the school committee of every city and town shall purchase, at the expense of such cily or town, text-books and supplies used in the public schools; and said text-books and supplies shall be loaned to the pupils of said public schools free of charge, subject to rules of the committee.

The school committee directs what books shall be used, and prescribes, as far as practicable, a course of studies and exercises.

The committee must require the daily reading of some portion of the Bible, without written note or oral comment. It is recognized as fulfiling the requirement of law that the teacher shall read the Bible as part of the morning devotional service without requiring every pupil to do so. (Pub. stat. rel. to pub. inst., 1892, with annot. and exp?., p. 48.)

Michigan,1893. - The district board specifies the stadies to le pursued in its

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schools and se'ects the text-books, including those with the temperance lessons, approved by the State board of education. Text-books adopted are not to be changed for five years except by consent of a majority of the qualified voters present at an annual meeting or a special meeting called for the purpose.

The district board is authorizel to purchase, at district expense, books necessary to supply indigent pupils.

On a majority voie, at an annual meeting with specified previous notice of the vote, the district board shall purchase the necessary books, to be the property of the district and loaned to pupils, providing that individuals may buy their books from the board, and that the question of free text-books may be revived at later annual meetings. The books are bought after proposals through contracts.

Officers neglecting, to proceed after vote of the district for free text-books are deemed guilty of misdemeanor and liable to a fine not more than $\$ 50$, with or without imprisonment in the county jail not exceeding thirty days.

Minnesota, 189\%.-The board of trustees or board of education of each and every school district is empowered to select, adopt, or contract for the text-books needful for the use of the school or schools under its charge, and the said board shall have power to purchase the text-books selected or contracted for, and provide for the loan, free of cherge, or sale at cost of such text-books to the pupils.
No adoption or contract must be for less than three nor more than five years, within which the teat-books shall not be changed.
Whenever five or more legal voters of any district petition the board of school trustees to submit to vote the question of free text-books it is the duty of the trustees to call a meeting with ten days notice. The cuastion may come up at an annual meeting with liko notice. If favored by a majority vote, the trustees shall provide free teat-books out of the school funds.

The temperance lessons are obligatory, and the superintendent of public instruction and the presidents of the normal schools are directed to recommend a suitable text-book and furvish it at cost to the several school districts.

Nebraska, 189\%.-It is made the duty of school boards to purchase all text-boozs necessary for the schools, and they are authorized to maio contracts with publishers for terms not eaceeding five years at prices not exceeding those for any individual or corporation in the United States, and with guaranty of any reduction nade anywhere during life of the contract.
Publishers are to file price lists and bonds of $\$ 2,000$ to $\$ 30,000$ with the State superintendent of public instruction, who prepares copies of the lists, and sends them, as well as forms of contracts, through the (elected) county superintendents, to all districts.
All text-books purchased by district boards are held as the property of the district, and loaned to pupils free of charge, the pupils being held responsible for any damago, losz, or failure to return the books in due time and to the person designated by the board.
Any parent or pupil may purchase from the board necessary books at cost price. The board may designate a local dealer to handle the books for the district, with such increase above contract price to pay cost of transportation and handling as may be agreod upon.
New Hampshire, 1838.--Each town constitates a single district for school purposes. The school board prescribes the studies. The board is required to purchase text-books at the expense of the city or town and loan them to the pupils free of charge under such rules as it prescribes, making provision for sale at cosit to such pupils as wish to purchase them for their own use.

New Jersey, 1895.-Each township constitutes a school district; each city, borough, and incorporated town constitutes a school district separate and distinct from the township school district.

It is the duty of the local board of education to provide teat-books and loan the
same free to all the pupils, subject to orders and regulations of the board. The purchase is made from a free text-book fund raised by special school tar.

Any school officer accepting any consideration for promoting the sale of any books or violating the provisions of the act is deemed guilty of a misdemeanor, punishable by removal from offce.

New York, 1898. - In common-school districts the inhabitants at an annual or special school-district meeting may appropriate money for the purchase of free text-books for indigent pupils. This is the extent of their power, and even this is rarely exercised. There are about 12,000 common-schoul districts.

The inhabitants of union free-school districts are arthorized by statute to appropriate money for the purchase of free text-books for the pupils residing in their districts. The proposition to be submitted to the meeting must be given and served upon every inhabitant prior to the meeting. This power is rarely exercised. There are about 700 union free-school districts, and probably scarcely 100 of them provide free text-books for all pupils.

The cities of the State by their charters are authorized to provide free textbooks for all resident pupils. The books are loaned to be returned at the end of the term. No reports on the subject are made to the state department by dis. tricts or cities, but the belief is that about one-half the cities avail themselves of their charters for free text-books.

North Daloota, 1896. -The school board of any city, town, or district is empowered to select, adopt, or contract for text-books, also to purchase them and provide for the loan, free of charge, or sale at cost to the pupils.

Cn petition of a majority of the qualified elechors the toard must subinit the question of providing free text-books to the next annual meeting, and on a majority vote it is the duty of the board so to provide.

Pennsyluania, 189\%.-Immediately after the annual election of teachers in each school district and before the opening of the next term, there must be a meeting of the directors and teachers of each district, at which the directors decide upon a series of schoolbooks for exclusive use for the year. The school directors or controllers purchase text-books as required out of the school fund and furnish them free of cost for use in the schools, subject to the orders and provisions of the directors or controilers. No change in text-books must be made more than once in three years.

The Scriptures come under the head of text-books, and they should not be omitted from the list.

It is unlawful for anyone offially connected with the school system to promote the sale of auy book or have on interest in such sale, under penalty of fine or imprisonment.

Rhode Island, 1896.-The school committee of each town prescribes the studies and purchases the teat-books to be loaned to the pupils free of charge, subject to rules of the committee. A change may be made in the schoolbooks in any town by a two-thirds vote, of the whole committee, and, in the city of Providence, by a majority vote, provided that no change shall be made oftener than once in three years, unless by consent of the State board of education.

South Dakota, 1897.-The county board of education-consisting of the (elected) county superintendent, the superintendents of cities or towns, the county State's attorney, the board of county commissioners, and one person from each commissioner's district, selected by the school board of such district-selects and alopts all text-books for a term of five years, after receiving proposals and guaranties from publishers. The board of county commissioners contracts with pubiishers, designating a depository in the county where books shall be sold at not more than 10 per centadvance on cost. A provision is inserted in the contract that it becomes void as to any kook when the State has published a corresponding book.

Each depositary is putunder bond and must make returns to the county anditor
monthly. On a written petition of the electors of any school corporation the board shall arrange to furnish free use of books. A safe bookcase is required. The books are to be the property of the school corporation, used only on order of the board.

Utah, 1896.-The State superintendent of schools, county superintendents, and the principal of the State normal school, or a majority of them in convention, decide what text-books shall be used, except in cities of the first or second class, not to be changed for five years, except for sufficient cause, to be decided at a special convention called for that purpose.

In cities of the first and the second class the boards of education have power to furnish and loan to pupils all text-books used by them.

Wisconsin, 189\%.-At the annual meeting of every school district the question of providing free text-books must be submitted to popular vote.

The boards are required to determine what books snall be used in their respective districts.

## COEDUCATION IN THE UNITED STATES AND IN FOREIGN COUNTRIES.

Coeducation, or the education of boys and girls in the same classes, is the general practice in the elementary schools of the United States. Exceptions to this rule are found in a few cities-less, apparently, than 6 per cent of the total number. In the majority of these cities the separation of boys and girls has arisen from the position or original arrangement of buildings, and is likely to be discontinuel under changed conditions. Of the fifiy principal cities enumerated by the census of 1890, four, namely, Philadelphia, Pa.; Newark, N. J.; Providence, R. I., and Atlanta, Ga., report separation of the sexes in the high schools only; two cities of this class-San Francisco, Cal., and Wilmington, Del.-reported, in 1892, separation in all grades above the primary. In six cities-New York and Brooklyn, N. Y.; Boston, Mass.; Baltimore, Md.; Washington, D. C., and Louisville, Ky.-both separate and mixed classes are found in all grades. Five cities of the second class, having a population of 8,000 or more, report separation of the sexes in the high schools, and ten cities of the same group separate classes in other grades. Of cities whose population is less than 8,000 , nine report separate classes for boys and girls in some grades.

Coeducation is the policy in about two-thirds of the total number of private schools reporting to this Burean and in 65 per cent of the colleges and universities. On November 14, 1900, the following vote was passed by the board of trustees of Clark University, Worcester, Mass., viz, "that the university will admit candidates for the degree of doctor of philosonhy and will confer that degree without regard to the distinction of sex."

Foreign countries. -In England 65 per cent of the departments into which the elementary schools are divided have boys and girls in the same classes; in Scotland, 97 per cent. Statistics for Ireland show that 51 per cent of the national schools have a mixed attendance of boys and girls.

Separate education is the general policy in English schools of secondary grade, and where both sexes are admitted to the same school it is generally to separate departments. The royal commission on secondary education advocate the extension of the coeducational policy, and since the problication of their report (1895) experiments in this direction have noticeably increased.

In the British colonies, with very few exceptions, voth mixed and separate schools are found. In Ontario all the schoo?s are mixed. In Quebec the schools for English children are, as a rule, mixed, but in those for the French the sexes are separated. In the Australasian colonies the tendency to separate departments for boys and girls is noticeable in cities. In Cape Colony, while nearly all schools are mixed, separate schools for girls are encouraged.

In France custom and sentiment favor the separate education of boys and girls,
and the law requires every commune having above 500 inhabitants to establish a separate school for girls unless specially authorized to substitute therefor a mixed school. The attendance upon mixed schools slightly increased during the last decade, but not enough to indicate any decided change of sentiment in this respect. The mixed schools are seldom found in cities.

The department of the Seine, which is occupied by Paris and its environs, reported in 1891-92 for public schools only 0.2 per cent of the pupils enrolled in mixed schools, and for private schools 9.2 per cent.

In secondary schools, public and private, separate education is the universal rule.
Germuny.--Separate education is the preferred policy in the German States, but is not practicable in the rural primary schools. According to statistics of 1891, in Prussia two-thirds of the children in the common schools were in mixed classes, but in the cities the proportion was only three-tenths. In Saxony only the two lowest classes are mixed, so that separation occurs generally at the tenth year of age-always by the twelfeh.

Other continental countries.-Similar conditions prevail in the remaining countries of Europe, the tendency toward separation being most strongly marked in the Catholic countries. In Italy the law calls for separate schools for boys and girls, and if they attend at the same building it must be in separate departments, each provided with its own entrance door. The lowest classes, however, may be, and often are, mixed.

In Norway, and to a less extent in Denmark, girls are securing admission to secondary schools formerly reserved for boys.

The South American republics follow the precedent of the Latin states of Europe. Brazil, like Italy, requires separate schools for the two sexes. In 1888 the experiment of admitting boys and girls to the same class room was made in a few schools, but they were seated in different rooms outside of recitation hours,

Coeducation in the universities of Europe.-The adverse vote of the senate of Cambridge University upon the proposition to admit women to the university degrees fixes for the present the statris of women with respect to the great English universities. The vote, which was taken May 21, 1897, stood 1, 70 i against to 661 for the resolution.

The university colleges established in England since 1868 are open to men and women. By the "universities act" of 1889 the Scotch universities were authorized to open their doors to women. Edinburgh admits them to the classes with men. Glasgow has affiliated Queen Margaret College for Women, and more recently (1895) opened all lectures in the faculty of arts to women. The University College of Dundee, affiliated to St . Andrews, is coeducational.

In France women have never been legally deprived of university privileges, and since 1863, when the first woman was enrolled in the Paris faculties, the number of women matriculates has been gradually increasing.

The univers:cies and secondary schoo's of Italy admit students of both sexes to the same class, a policy at variance with that parsued in the elementary schools.

Women have recently been admitted to courses in the universities of Germany, Austria, and Hungary, special authorization being required in each individual case.

The University of Athens was open to women in 1820.

## TEACHERS' SALARIES.

The list of city school systems in cities of over 8,000 inhabitants, as published in the Repor't of 1898-99, numbered 632. The revision of this list according to the figures of the Twelfth Census caused a reduction of the number to 568 , a loss of 64 which had claimed populations of over 8,000 . It being generally the case that the average salaries paid teachers and supervising officers in the small cities that were dropped from the list of last year are far below the average in all cities of over 8,000 inhab-
itants, to this change in the list is due the large apparent increase in the average salary for the cities of the country at large. In the case of some of the States, however, as in New Jersey and Illinois, the changes in average salaries can not be assigned to this cause, for, though four small cities were added to the list of the former, the average salary shows a marked increase over those of the previo u year, and while Illinois, by the revision above mentioned, loses six cities, the average salary for the State shows a falling off from $\$ 784.58$ in $1898-99$ to $\$ 745.13$ in 1899-1900. A notable salary change resulting from an actual improvement in the salary schedule appears in the figures for New York, which show an increase of $313 \% .17$ over the average salary in this State for the preceding year.

Average annual salaries of teachers and supervising offcers in cities of over $\mathcal{S}, 000$ inhabitants, summarized by States, etc.

| Cities of- | 1893-99. |  |  | 1899-1900. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { teachers } \\ \text { and } \\ \text { super- } \\ \text { vising } \\ \text { officers. } \end{gathered}$ | Expenditure for supervision and teaching. | Average anuual salary. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { teachers } \\ & \text { and } \\ & \text { super- } \\ & \text { vising } \\ & \text { oficers. } \end{aligned}$ | Expenditure for supervision and teaching. | Average annual salary. |
| United States | 87,240 | \$55, 659, 887 | 8688.35 | 88,207 | 859, 183,586 | $86 \% 0.81$ |
| North Atlantic Division | 41,9:4 | 27,571, 736 | 657. 66 | 43,358 | 30, 978,507 | 714.48 |
| South Atlantic Division | 5,896 | 3,278,909 | 556.12 | 5,85\% | 3,319,268 | 566. î2 $^{\text {a }}$ |
| South Central Division. | 4,356 | 2,341,240 | 537.47 | 4,280 | 2,309, 323 | $5 \% 9.56$ |
| North Central Division | 30,141 | 18,837,056 | 691.96 | 29, $87 \%$ | 18,642,461 | $683.9 \%$ |
| Western Division. .-.. | 4,923 | 3, 660,836 | 743. 6 | 4,855 | 3,931,007 | 810.30 |
| North Atlantic Division: |  |  |  |  |  |  |
| Nannew --.. | 511 | 314, 27.059 | 54.809 | 683 585 | 306, ${ }_{2}$ | $448.05$ |
| Vermont-- | 15.2 | 70,950 | 466. 77 | 161 | 73,350 | 455.59 |
| Massachusetts | 8,529 | 6,057, 899 | 713.79 | 8, 714 | 6, 343, 889 | 723. 69 |
| Rhode Island | 1.330 | 790, 974 | 592.49 | 1,288 | 795,765 | 618. 60 |
| Connecticu | 2,219 | 1,287, 334 | 572.71 | 2,211 | 1,279,606 | 578.74 |
| New York | 16,162 | 11,543, 660 | 714.24 | 16,\%65 | 14, 2822,374 | 8.51. 41 |
| New Jersey | 3,374 | 1,961, $20 \pm$ | 589.15 | 3,87\% | 2,315, 801 | 597. 31 |
| Pennsylvania | 8,002 | 5,251,271 | 580.23 | 9,124 | 5,301, 239 | 582.02 |
| South Atlantic Division: |  |  |  |  |  |  |
| Delaware Marylana | 247 | $\begin{array}{r} 131,311 \\ 1,138,798 \end{array}$ | 491.14 | 250 | 124, 804 | 495.25 |
| District of | 1,161 | -801, 016 | 689.93 | 1,236 | 838,577 | 683.99 |
| Virginia | $6 \times 7$ | 320,664 | 466.75 | 690 | 330,341 | $4{ }^{474.63}$ |
| West Virginia | 297 | 138.073 | 464.89 | 326 | 141,195 | 433.11 |
| South Carolina | 205 | 85, 863 | 418.85 | 201 | 87, 402 | 434.83 |
| Georgia | 819 | $437.08 \pm$ | 533.68 | 795 | 419, 760 | 538.00 |
| Florida | 199 | 101,816 | 5\%6. 71 | 203 | 84, 636 | 412.85 |
| South Central Division: | 1,119 | 696,583 | 629.30 | 1,112 | 649,063 | 583.63 |
| Tennessee | 593 | 322, 484 | 543.82 | 1,679 | 340, 996 | 502.20 |
| Alabana | 395 | 145, $80{ }^{\text {a }}$ | 369.12 | 292 | 133, 455 | $45 \%$ \% 04 |
| Mississippi |  | 61,086 |  |  |  |  |
| Louisiana | 753 | 319,010 | 463.49 | 752 | 375, 779 | 499.70 |
| Texas..-- | 1,064 | 627.358 | 589.68 | 1,027 | 604, 862 | 588.96 |
| Arkansas- | 208 | 129,282 | 621.54 | 809 | 120,513 | 576.61 |
| Oklahoma | 31 | 6,63:2 | 213.93 | 70 | 24,632 | 351.89 |
| North Central Division: |  |  |  |  |  |  |
| Ohio.... | 5, 745 2,633 | $3,562,192$ $1,440,010$ | 620.05 546.90 | 5,842 | $3,682,847$ $1,407,768$ | $\begin{aligned} & 620.14 \\ & 509.05 \end{aligned}$ |
| Inlinois. | 8,021 | 6,293, 133 | 781.58 | 8, 100 | 6, 035,583 | 745.13 |
| Michigan | 2,945 | 1,560,540 | 529.89 | 3,016 | 1,630,395 | 549.55 |
| Wisconsin. | 2,383 | 1.298,579 | 544.93 | 2,433 | 1,334,581 | 548.53 |
| Minnesota | 1,948 | 1,168.650 | 599.92 | 1,8\%6 | 1,178, 746 | 628.33 |
| Iowa.- | 1,794 | 891,473 | 496. 92 | 1,840 | -866, 428 | 470.88 |
| Missouri | 2,871 | 1,669, 869 | 581.63 | 2,921 | 1,715,684 | 587. 35 |
| North Dakota | 75 | 43, 881 | 581.41 |  |  |  |
| South Dakota | 59 | 27,931 | 558.6 | 53 | 26,207 | 494.47 |
| Nebraska | 866 | 490, 383 | 566.20 | 638 | 399,635 | 695.39 |
| Kansas - | 810 | 390,475 | 48\%. 06 | ${ }_{72} 7$ | 399,587 | 517.60 |
| Western Jivision: Montana | 241 | 150,428 | 665.68 | 263 | 222, 000 | 844.10 |
| Wyoming | 28 | 21,515 | 769.46 |  |  |  |
| Colorado | 833 | 632, 399 | \%95. 19 | 907 | 704, 421 | 776.65 |
| Utah. | 404 | 213.093 | 527.45 | 383 | 206, 931 | 540.29 |
| Washington | 536 | 274,582 | 512. 28 | 609 | 375, 306 | 616.20 |
| Oregon California | 346 2,503 | 2,080,005 | 661.22 831.60 | [ 243 | 2, $2,162,416$ | 651.56 943.05 |

CHAPTER XLVII
STATISTICS OF ELEMENTARY EDUCATION IN FOREIGN COUNTRIES.

Statistics of elementary education in foreign countries-Continued.

| Countries. | Date of repoit. | Enrollment in elementary schools. |  |  |  | A verage attendance. |  | Number of teachers. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Boys. | Girls. | Total. | Ratio to total population. | Total. | Ratio to enrollment. | Men. | Women. | Total. |
| 1 | 9 | 3 | 4 | 5 | 6 | 7 | 3 | (1) | 10 | 11 |
| British India: Asia. |  |  |  |  |  |  |  | . |  |  |
| Assam | 1896-97 |  |  | $84,26 \%$ $1,259,615$ | 1.57 |  |  |  |  |  |
| Berar. | 1897-98 |  |  | 1,250,085 | 1.72 |  |  |  |  |  |
|  | 1889-1900 | 483,814 | \%17, 894 28.660 | 561,703 143,780 | 2.97 1 1.90 | 435, 715 | 77.57 |  |  |  |
| Burmah (upper and lower) | 1899-1900 | 115, 120 | 28,660 | 143,780 | 1.90 1.13 |  |  |  |  |  |
| Coorg--........... | 1596 |  |  | 4, 03:9 | 2.33 |  |  |  |  |  |
| Madras | 1899-1300 | 581,9\%1 | $3{ }^{3 \%}, 644$ | 619,565 | 1. 74 |  |  |  |  |  |
| Mysore ----- | 1898-99 | 73, 263 | 11,584 | a86, 847 | 1. 79 |  |  |  |  |  |
| Northwest provinces and Oud | $1897-98$ $1897-98$ | 258,614 <br> 167.544 <br> 1682 | 13,449 13,850 | L272, 181,394 | . 88 |  |  |  |  |  |
| Ceylon.... | 1898 | 110,290 | 39, 910 | 150,230 | 4.99 | 91,529 | 60.92 |  |  |  |
| Japan.. | 1898 | 2,032, 358 | 1,316,567 | 3,318,925 | 7.84 | 3,248,349 | 96.99 |  |  | 83,157 |
| AFrica. |  |  |  |  |  |  |  |  |  |  |
| Cape of Good Hope | 1893 | \%5, 13\% | 72, 287 | 147.424 | 9.65 | 109,598 | 74.38 | 1,844 | 3,690 | 5,534 |
| Egypt .-.----------- | 1900 $1899-1900$ |  |  | 111 21,378 $24,5: 23$ | 2.15 4.50 |  |  |  |  | 15,999 |
| British Columbia | 1899-1900 | 11,0\% 6 | 10,455 | 21,531 | 21.93 | 13,438 | 62.44 |  |  | 494 |
| Manitoba--...- | 1900 |  |  | c50,460 | $c 35$ | 27, 870 | 50.52 | 592 | 1,004 | 1,596 |
| New Brunswick --..... | 1899 |  |  | 61, 444 | 19.12 | 36, 586 | 59.54 |  |  | 1,856 |
| Northwest Territories | 1509 | 10, 113 | 9,630 | 20,343 |  | 9,430 | 46.35 |  |  | - 592 |
| Nova Scotia --..-- -- -- -- | 1897 1900 |  |  | 100, 817 |  | 54,922 269,092 | ${ }_{5}^{54.46}$ |  |  |  |
| Ontario --...-.-.jordiand | 1900 1896 | 12,145 | 9,993 | 471, $2 \times 3$ | 22.27 | 269,09\% | 56.12 60.58 | 2,713 | $\begin{array}{r}6,620 \\ \\ \hline 245\end{array}$ | 9,333 569 |
| Quebec -.-.-- | 1899-1900 | 99,692 | 99, 230 | 199,422 | 13.39 | 138,539 | 69.47 | 190 | 5,750 | 5,910 |
| Mexico -...- | 1897 |  |  | 584,171 | 4.68 | 391,65\% | 67.01 |  |  | 10,327 |
| Bermuda | 1898 |  |  | 1,996 | 12.64 |  |  |  |  |  |



[^151] $c$ Enrollment included 105 pupils over 21 years of age. 50,265 between 5 and 21 years of age, and 90 below 5 years
 e Includes 117 monitors and monitresses.

| Countries. | Current expenditures. |  |  |  |  | Population. | Date of census. | Chief ofticer of education. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Salaries. | Incidentals. | Total. | $\begin{aligned} & \text { Per cap- } \\ & \text { ita of } \\ & \text { exroll- } \\ & \text { ment. } \end{aligned}$ | Per capita of population. |  |  |  |
|  | 17 | 1.8 | 14 | 15 | 36 | 具年 | 13 | 19) |
| EUROPE. |  |  |  |  |  |  |  |  |
| Austria-Hungary <br> Austria <br> Hungary $\qquad$ $\qquad$ $\qquad$ | $\$ 18,871,019$ | \$6, 83 | ¢25, 705, 850 | \$4. 60 | 50.60 | 41,358,886 | 1890 | No imperial office. |
|  | $14,813,156$ | 5, 495, 945 | $20,309,101$ | 6.83 | .8) | 23, 895,413 | 1890 | Dr. W. von Hartel, minister of public instruction. |
|  | 4,95\%, 863 | '1,338, 895 | 5, 396,759 | ¢. 48 | 45 | 17,463, 473 | 1890 | Dr. J. von Wlassies, minister of public instruction. |
| Bolgium |  |  | \%,152, 211 | 9.22 | $1.0 \%$ | 6, 669, 732 | 1898 | M. de Trooz, minister of the interior and public instruction. |
| Bulgaria Denmark |  |  | 1,410,885 | 4.10 | .43 | 3,310,713 | 1893 (Jan.1) | Dr. Vatchow, minister of purolic instruction. |
|  |  |  |  |  |  | :2, 185, 335 | 1890 | Christiansen-Stadei, minister oí ecclesiastical affairs and public instruction. |
| France .-.-.-.-.-.-.-.-.-.-.GermanyBaden |  | ------- | a 42, 803, 050 | 10.21 | 1.18 | 38,517,975 | 1896 | M. Georges Leygues, minister of public instruction and fine arts. |
|  |  |  |  |  |  |  |  |  |
| Baden (grand d |  |  | 3,2\%0,000 | 9.00 | 1.75 | 1,866,584 | 1900 | Dr. W. Nokk, minister of justice, worship, and education. |
| Bavaria (kingdom) |  |  | b 5, 869, 883 | 5.25 | . 95 | $6,175,153$ | 1900 | Herr J. von Schraut, minister of worship and education. |
| Bremen (flee city) | 180,000 | 70,000 | 250,000 | 10.00 | 1.11 | 234, 697 | 1900 | Dr. D. Ehmek, senator, president department of schools. |
| Hamburg (free city) |  |  | c 1,740, 100 | 17.00 | 2.26 | \%68,349 | 1900 | Dr. J. O. Stammann, senator, president department of schools. |
| Prussia (kingdom) | 31,871,325 | 12,5\%\%,049 | 44,248,374 | 7.00 | 1.29 | 34, 463, $37 \%$ | 1900 | Di. Conrad Studt, minister of public worship, education, and medical affairs. |
| Saxony (kingdom | 4,604, 053 | 1,466,783 | 6,070,786 | 8.30 | 1.45 | 4,199,758 | 1900 | Dr. E. H. M. Wäntig, minister of worship and education. |
| Würtomberg (kingdom) |  |  | b1, 416, 56: | 3. 80 | . 70 | 2, 165, 765 | 1900 | Dr. von W eissäcker, chief of department of worship and education. |
| Great Britain and Ireland: England and Wales |  |  | 58,075,848 | 10.30 | 1.19 | 31, 742,588 | 1899 | Committee of council on education; vice-president for England, Sir John Gorst; vicepresident for Scotland, Lord Balfour of Burleigh. |
| Scotland |  |  | \% 7 , 880, 704 | $10.7 \%$ | 1.84 | 4,281, 850 | 1899 |  |
| Ireland. |  |  | 5,908,870 | 7.4: | 1.30 | $4,535,516$ | 1896 | Commissioners of national education in Ireland. |
| Greece |  |  |  |  |  | 2,483,806 | 1896 | M. Sp. B. Staïs, minister of ecclesiastical affairs and publicinstruction. |
| Italy |  |  | 12, 164, 244 | 5.15 | . 38 | $32,045,404$ | $1900 \text { (Dec. } 31 \text { ) }$ | Nunzio Nasi, minister of public instruction. |
| Netherlands | 4,420,448 |  | 6,158,336 | 8.43 | 1.20 | 5, 103, $9 \sim 4$ | 1899 (Dec. 31) | H. G. Borgesius, minister of interior. |

ELEMENTARY EDUCATION IN FOREIGN COUNTRIES. 2619.



## SOUTH AMERICA.

 Argentina Bolivia Brazil Colombia Paraguay Uruguay Venezuela Mauritius. AUSTRALASIA. New South Wales....... Queensland. South Austrolia.. West Australia Hon. G. Randell, minister of education.Hon. W. . Walker, minister of education.
Hon. Stafford Bird, minister of education.





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[^0]:    ${ }^{1}$ In preparing the following article the compiler has made use of An Historical Discourse on the Two hundredth Anniversary of the Founding of the Hopkins Grammar School, New Haven, Conn., delivered before the Hopkins Grammar School Association July 24, 1860, by Leonard Woolsey Bacon, and loaned through the courtesy of Professor Dexter; also of different catalogues, but more particularly those of 1850-51 and 1898-99.

[^1]:    ${ }^{1}$ The succession of teachers here given is nearly or quite correct. The college where each one graduated, and the time of graduation, is stated. How long they were severally in office can not be ascertained.

[^2]:    ${ }^{1}$ Yale Obit. Rec., June, 1886.

[^3]:    ${ }^{1}$ Principles of the History of Language, by Hermann Paul. Translated from the second edition of the original by H. A. Strong, London, 1888.
    

[^4]:    ${ }^{1}$ Ueber den Dialekt der attischen Vaseninschriften. Von Paul Kretschmer. In the Zeitschrift für vergleichende Sprachforschung auf dem Gebiete der Indogermanischen Sprachen. xxix (1888), pr. 381-483.
    ${ }^{2}$ Bergk, Geschichte der Griechischen Litteratur, iv, pp. 238-239.
    ${ }^{3}$ (Xen.) Respub. Athen., ii, 8.

[^5]:    ${ }^{1}$ Athenaeos, Deipnosophists, vi, 272 b.
    ${ }^{2}$ Büchsenschütz, Besitz und Erwerb im griechischen Altcrthume, pp. 116-119.
    ${ }^{2}$ Lyses, 223 a. ${ }^{4}$ Plat., Alkibiad., $111 \mathrm{a}-\mathrm{b}$.
    ${ }^{5}$ Kock, Comicorum Atticorum Fragmenta, I; Plat., frag., 168.
    ${ }^{6}$ Scholium to Aristophanes's Frogs, 681. ${ }^{7}$ Griechische Grammatik (1890), p. 21.

[^6]:    ${ }^{1}$ Thouk., vii, 68, 3.

[^7]:    ${ }^{1}$ Chatzidakis, in 'A $\theta \eta \nu$ â, viii (1896), p. 169.
    2" La langue grecque et le style de Polybe sont tels que les araient faits les trois siècles d'élaboration que l'araient précédé. La langue grecque avait * * * perdu ce que lui resistait encore de raideur, et arait acquis une flexibilité inconnue de Thucydide et même de Xénophon. Polie par une sorte de frottement continuel dans les assemblées publiques, dans les écoles des philosophes, dans le commerce et dans l'usage quotidien des gens instruits, elle n'offrait pius aucune résistance à la pensée, et permettait de tout exprimer avec une facilité merveilleuse." Histoire de la Littérature Grecque. Paris, 1869, vol. ii, p. 311.
    ${ }^{3}$ Cf. Schmid, Der Atticismus in seinen Hauptrertretern. Stuttgart. 1887-1593, passim.
    ${ }^{4}$ Christ, Geschichte der Griechischen Litteratur. München. 1898. p. 368.

[^8]:    ${ }^{1}$ De Philemone Atheniensi glossographo, in Comm. Ribbeck. 441-450.
    ${ }^{2}$ Grammatik der Attischen Inschriften. Dritte Auflage. Berlin. 1900.
    ${ }^{3}$ In the Neue Jahrbücher, 1900, pp. 241-262.
    ${ }^{4}$ Chatzidakis, 'A $9 \eta \nu \hat{a}$ II (1890), pp. 154-159, and III, pp. 253-258; and in his Einleitung, p. 48.
    ${ }_{5}^{5}$ Deffner, Zakonische Grammatik, Erste Hälfte. Berlin. 1881.
    ${ }^{6}$ Krumbacher, Geschichte der Byz. Litteratur (1897), p. 790.

[^9]:    ${ }^{1}$ Psichari, Essais de grammaire historique neo-grecque, I, p. 23-24; specimina vetustissima.
    ${ }^{2}$ Chatzidakis, Einieitung, p. 67, and pp. 285 ff.

[^10]:    ${ }^{1}$ Byzantinische Zeitschrift, herausgegeben von Karl Krumbacher. Leipzig.
     Haveniotnuiov. Athens. 1888.
    ${ }^{2} 527-565$.
    4565-57s.

[^11]:    ${ }^{1}$ Died about 817 A. D.
    ${ }^{2}$ Reigned from 912 to 959.
    ${ }^{3}$ These are such as The history of Basileios I, De administrando imperio, De caerimoniis.

[^12]:    ${ }^{1}$ Krumbacher, Byz. Litteratur., 827-832.
    ${ }^{2}$ Reigned 1118-1143. ${ }^{5}$ Krumbacher, Geschichte, etc., 802 ff .
    ${ }^{8}$ Krumbacher, Geschichte der Byz. Litt. 804 ff. ${ }^{6}$ Krumbacher, Geschichte, 806 f.

[^13]:    

[^14]:    ${ }^{1}$ Hodias, De Græcis Illustribus, pp. 188-189. Cf. also Gibbon (Smith's ed. 1881), viii, pp. 105-106.
    ${ }^{2}$ Masarachi, Vita degli uomini illustri dell' isola di Cefalonia. Venezia. 1843-1845; pp. 23-50, Elia Miniati.

[^15]:    ${ }^{1}$ Mem. 2, 1, 21 ff .
    ${ }^{2}$ Somnium.
    ${ }^{3}$ Mondry Beaudoin, Quid Korais de neohellenica lingua senserit. Paris, 1883; and ©epєıavós, ${ }^{\circ}$ A $\delta a \mu a ́ v \tau \iota o s$ Kopaŋ́s. Triest. 1889-1900.
    

[^16]:    
    2 observations sur l' opinion de quelques hellénistes touchant le grec moderne. Paris, 1802.
    

[^17]:    ${ }^{1}$ Le Marquis de Queux de Saint-Hilaire, La presse dans la Grèce depuis l'indépendance jusqu'en 1871. In the Annuaire des études grecques, 1871. pp. 47 ff .
     p. 63.
    

[^18]:    ${ }^{1}$ Stephanos Kounanoudes, ミvvay $\tau \hat{\omega} \nu \kappa \alpha \theta^{3} \dot{\eta} \mu a ̂ s ~ \chi \rho o ́ v \omega \nu$. Athens, 1900. Two vols.
    $2^{2}$ Aд $\lambda \eta$, Leipzig, 1893.

[^19]:    1"Schon Polybios klagt über die Schwierigkeiten, denen er begegnete, so oft er einen hübschen Gedanken in einer eben so hübschen Sprachform darstellen wollte, und meint, es sei viel besser auf den Inhalt als auf die Form der Darstellung zu achten. Zu einer solchen Äusserung konnten z. B. Thukydides oder Demosthenes unmöglich kommen."-Einleitung, p. 3-1.

[^20]:    ${ }^{1}$ Unless my memory is entirely at fault, Mr. Morrill stated to me while the work was in progress that the conception and design of the marble terracing were to be credited to Mr. Frederick Law Olmsted, but Mr. Morrill was in a position where he could accept or rejcet the design, and was no less, of course, the sponsor for it before Congress.

[^21]:    ${ }^{1}$ For the condition of the colleges in this respect in 1899 , see Appendix.

[^22]:    ${ }^{1}$ By the act of 186230,000 acres were donated to each State for each Senator and Representative in Congress to which it was entitled. By the act of 1890 each State receives an equal appropriation.

[^23]:    ${ }^{1}$ Rep. of Eng. Educ. Dept., Com. on Defective and Epileptic Children, 1898, 2 vols., and later reports.

[^24]:    $\alpha$ Does not include dentistry, pharmacy, and veterinary.

[^25]:    ${ }^{1}$ Reprinted from The Open Court. The addresses referred to in the present sketeh are also to be found in a memorial pamphlet entitled: Proeeedings at the Laying of a Wreath on the Tomb of Hugo Grotius in the Nieuwe Kerk, in the City of Delft, July 4, 1899, by the Commission of the United States of America to the International Peace Conferenee of The Hague. The Hague: Martinus Nijhoff. 1899.

[^26]:    ${ }^{1}$ Of course some may have died, some may have moved out of town, and some may have gone to private schools; but these losses have been very nearly made good by the accession of children from families moving into the city and from private schools.

[^27]:    ${ }^{1}$ I omit the first grade and the kindergarten for the reason that their enrollment is quite irregular. A few schools have no kindergartens, and in all schools many pupils do not enroll till they are 7 or 8 years old.

[^28]:    ${ }^{1}$ There are special reasons for the sudden fall shown in the fourth year of the Boston high schools which do not hold in St. Louis.

[^29]:    ${ }^{1}$ The Kansas City Manual Training High School was opened in September, 1897. The enrollment for the present year, 1900-1901, is as follows, boys and girls:
    
    Second-year class .................................................................................................. 361
    
    Fourth-year class .................................................................................................... 140
    Post graduates .................................................................................................. 39
    Total.................................................................................................... 1, 422
    It is most remarkable that 621 pupils should enter this new school fron the highest grammar grade. The population of Kansas City is 163,752; that of St. Louis is 575,238 .
    ${ }^{2}$ From the Philadelphia Times, Dec. 2, 1900.

[^30]:    ${ }^{1}$ From annual reports of the president and the treasurer of Harvard College, 1899-1900, pp. 36-49.

[^31]:    Forenoon and afternoon and night, Forenoon and afternoon and night, Forenoon, and what? The empty song repeats itself. No more? Yea, that is life. Make this forenoon sublime, This afternoon a psalm, this night a prayer,
    And time is conquered and thy crown is won.

[^32]:    ${ }^{1}$ There have been recently located in the northern suburbs of the city of Washington, in more or less close proximity to the Catholic University of America, a number of educational and other organizations of the church, the latest of which to go into operation is Trinity College, an institution for the higher education of women, founded by the Sisters of Notre Dame.
    The following statement regarding the opening of this college is taken from the Catholic Mirror of November 24, 1900. Through the courtesy of Monsignor Conaty the Bureau is cnabled to print the sermon delivered by him upon that occasion:
    "Trinity College opened its doors to students November 6, and began work with 20 students in the freshman class. It is the intention of the college authoritics to do no other than freshman work this year, and to build up the other classes from this first freshman one. While Trinity Collcge is an organization independent of the university, yet it naturally looks to the university for encouragement, direction, and instruction. The Sisters of Notre Dame are prepared to give all the regular instruction in the difierent class work of the college, and great hopes have been formed of the success which will attend their efforts.
    "The solemn dedication of the college took place St. Cecilia Day, November 22. His Eminence Cardinal Gibbons blessed the college building at 9.45 a. m. His Excellency Archbishop Martinelli sang the pontifical mass, and during the mass Right Rev. Mgr. Thomas J. Conaty, D. D., preached the sermon. In the aiternoon the ladies' auxiliary board held a reception in the new buildings."

[^33]:    ${ }^{1}$ Address delivered on the occasion of Mir. Pritchett's inauguration as president of the Massachusetts Institute of Technology, October 24, 1900.

[^34]:    ${ }^{1}$ This chapter contains items of interest regarding educational affairs in foreign countries taken from advance sheets of the reports of United States consuls abroad, published by the state Department.

[^35]:    ${ }^{1}$ The author uses the term gymnasium in the sense in which it is applied in Europe, meaning a classical high school or preparatory school for university students.

[^36]:    ${ }^{1}$ This report is inserted here to facilitate comparisons with American conditions regarding the

[^37]:    ${ }^{1}$ These historical facts are borrowed from a pamphlet by M. Levasseur: Résumé historique de l'enseignement de l'Économie politique en France de 1882 à 1892. Paris, Guillaumin, 1893.

[^38]:    ${ }^{1}$ The Ecole des Hautes Etudes Sociales comprises, with the Ecole de Morale and the Ecole de Journalisme detached from the college, an école sociale, which itself contains a preparatory section for instruction in popular universities.- [Note of the secretary.]

[^39]:    ${ }^{1}$ There exists, moreover, a chair of history of commeree at the faculty of letters of Aix-Marseille; a course of colonial history and geography is among the branches of instruction created by the Chamber of Commerce of Lyon.

[^40]:    ${ }^{1}$ Programmes annexed to the decree of January 18, 1887, supplemented by the decrees of April 8, 1890, January 4, 1894, March 9, 1897, and September 20, 1898.

[^41]:    ${ }^{1}$ Programmes annexed to the decree of August 18, 1893, modified by the decree of March $9,1897$.

[^42]:    ${ }^{1}$ See Hulin and Mahaim: La réforme de l'Enseignement supérieur et les Sciences sociales. Liège, 1889. See also, in the Almanach de l'Université de Gand for 1892, the discussion at the Congrès Universitaire Libéral of a "vœu en faveur de la création dans l'Université de l'État d'une Faculté de sciences sociales."
    ${ }^{2}$ See Brants: Coup d'œil à vol d'oiseau sur les écoles d'Économie politique en Belgique. Revue Générale, August, 1899.
    ${ }^{3}$ See in the Almanach det'Université de Gand for 1890 the article devoted to that school.

[^43]:    ${ }^{1}$ It has been seen, since the creation of the licentiate in commercial and consular science, how strong these utilitarian considerations are. The simple prospect of being able to apply for a position of consul attracts to them ten times as many young men as there are positions to bestow.

[^44]:    ${ }^{1}$ See especially the articles of Edm. Picard in the Societé nouvelle (1894), the Journal des Tribunaux (1894), and l'Humanité nouvelle (1897).

[^45]:    ${ }^{1}$ See especially his Leçon d'Ouverture du Cours de Méthodologie des Sciences Sociales of the Université Libre de Bruxelles, in 1889, which he republished in his little book entitled "L'Évolution des Croyances et des Doctrines Politiques," in 1895, as the opening chapter.

[^46]:    ${ }^{1}$ See on this subject the excellent work of M. Giuseppe Sergi, La Decadenza delle Nazioni latine, Turin, 1900.

[^47]:    ${ }^{1}$ I borrow my information from the schedules published in the catalogues of each faculty. I have not been able to verify them so as to ascertain whether the courses announced were actually given.

[^48]:    ${ }^{1}$ A circular sold to the auditors gives for each regular course a syllabus of several pages, which sums up in advance the principal points of each lecture.

[^49]:    ${ }^{1}$ Extract from old report printed in article on "University college school," in the Public School Magazine, by J. Russell.

[^50]:    This is the chapel; here, my son,
    Your father thought the thoughts of youth, And heard the words that one by one
    The touch of Life has turned to truth.
    Here in a day that is not far
    You too may speak with noble ghosts, Of manhood and the vows of war

    You made before the Lord of Hosts.

[^51]:    ${ }^{1}$ Education and School, p. 24.

[^52]:    ${ }^{1}$ Dr. Arnold's Miscellaneous Works, "Use of the Classics," 1834, pp. 358-360.

[^53]:    I. General functions of government: Distinction between central and local government; general view of the system of local government in London and the provinces.
    II. Borough government: Corporate towns and their privileges; officials; town councils and their duties.
    III. Public health: Urban sanitary authorities and rural sanitary authorities (district councils), election and duties.
    IV. County government: County council, its constitution and powers; county boroughs.
    V. The London County Council: Its peculiar powers; outline of what it has already accomplished.
    VI. Parochial government in the country generally: Parish meeting; parish council, its powers
    VII. The Iondon government act of 1899 .
    VIII. Local taxation: How money is obtained to defray expenses of local government.
    IX. The care of the poor: Boards of guardians and their powers; the principle of poor relief; outdoor and indoor relief; the workhouse.
    X. Education: Elementary schools; distinction between voluntary and board schools; school boards; free education; work of the London technical education board.

[^54]:    ${ }^{1}$ The following are extracts from the scheme as it appears in the evening-continuation school code for 1899:
    The nation and the State. What they mean - Responsibilities involved in representative government.

    ## 1. Representative government.

    A. Local government: The village and the parish; school districts; the poor-law union; districts under district councils, boroughs, and counties, etc.
    Work and powers of these bodies as regards rating and expenditure -_. health _-; education

[^55]:    ${ }^{1}$ This paper, if presented, was not among the 29 reports distributed to the members of the con-gress.-L. F. W.

[^56]:    they could, by insisting on smoke prevention, soon have beautiful trees and flowers in the town. "In order to learn to love it we must go to the beautiful placesas often as we can, and cry to see the beauty of woods, fields, clouds, and blue sky there, and we must notice also the beauty of form and color in trees, flowers, grasses, birds, and other beautiful things found in the country. And we must also look carefully at, and try to find beauty in, all the pictures of such things and of scenery that we can see.
    "The worid is full of beauty, and the perception of it is necessary for our welfare. It is as foolish not to learn to see it as it would be, if we had money in the savings bank which we needed for the purchase of food, not to learn how to draw it out."

[^57]:    ${ }^{1}$ The Education of Business Men in Europe; a report to the American Bankers' Association, by Prof. E. J. James. (New York, 1893, p. 232.) Sce also three other reports of the American Bankers' Association, entitled The Education of Business Mifn, I, II, III. (New York, 1891-1893.) For access to some of the works cited in this paper $\bar{I}$ am indebted to the courtesy of the education department, and the admirable library lately established in connection therewith under the direction of Mr. M. E. Sadler; and to the British Library of Political Science ( 10 Adelphi Terrace, Strand, London), where the student can consuit a unique and enormous collection of public documents and other works not to be found elsewhere.
    ${ }^{2}$ Mir. J.J. Findlay's instructive Bricf Report on Commercial Education in England, made to the Sheffield Chamber of Commerce, 1891; together with the Report on Commercial Education presented to the Associated Chambers of Commerce in 1887. (See also the papers on Commercial Education at the International Conference on Technical Education, held in London, June, 1897.)

[^58]:    1 See, for a complete list of these and other schools, The Annuaire de l'Enseignement Commercial et Industriel, par Georges Paulet (Paris, yearly), p. 700; and L'Enseignement Commercial ct les Écoles de Commerce en France et dans le Monde entier, nar Eugène Léauty (Paris, 1886), p. 778.

    2 Notice on the Commercial Instruetion Organized by the Paris Chamber of Commerce (Report to the Cicago Exhibition, 1893), Paris, 1893, p. 192. Industrial Edueation, by Sir Philip Magnus (London, 1888).
    ${ }^{3}$ See the Sixth Annual Report of the Technical Education Board of the London county couneil, London, 1899 , and the Report of the Special Sub-Committee of the London County Couneil on Commereiai Education, London, 1859. This total does net include the evening continuation classes of the school board for Loncion, which teach typewriting, shorthand, elementary Freneh, etc.

[^59]:    ${ }^{1}$ Compare Das Commercielle Bildungswesen in Oesterreich-Ungarn, von Franz Glasser (Vienna, 1893), p. 422.

[^60]:    ${ }^{1}$ This institution is recognized by German authorities as a higher commercial school. See the description of jt in Kaufmännisches Fortbildungsschulwesen (Brunswick, 1896), Vol. II, p. 356.
    ${ }^{2}$ See the introduction to Industrial Democracy. by Sidney and Beatrice Webb, London, 1898.

[^61]:    ${ }^{1}$ The absence of university recognition was pointed out in 1893 as the main defect of European institutions of commercial cducation. "What then is lacking in this ceonomic (commercial) education to make it in demand? It lacks only the sanction which crowns university stuaies. It is not sufficient to open the doors of entrance into the schools of commerce, one must also open the doors of exit. Nothing further can be done until the legitimate demands in favor of economic instruction shall be met, and it shall be placed on a par with classical education." (The Education of Business Men in Europe, by Prof. E. J. James, New York, 1893, p. 155.) In all the Belgian State universities, by royal decree of September 19, 1896, there is now a degree in commercial and consular sciences, forming a branch of the faculty of law. (Moniteur Belge, October 2, 1896.)

[^62]:    ${ }^{1}$ Taken from an article entitied "An inquiry relating to training for citizenship in the public schools," by the writer (School Reriew, October, 1538, University of Chicago Press, Chicago, Ill.).

[^63]:    ${ }^{1}$ I venture to use this word, as do the Freneh, in the sense of make inductions, after the analogy of deduce, although this meaning is not yet recognized by dietionarics. There seems to be special need of a verb in this sense.-L. F. W.

[^64]:    ${ }^{1}$ From the Annales de l'Institut International de Sociologie, Tome VII, Paris, 1901, pp. 163-203.
    ${ }^{2}$ Kritik der reinen Vernunlt, Ed. Hartenstein, 1868, p. 380.

[^65]:    ${ }^{1}$ I will cite among others: Auguste Comte, Philosophie Positive, Tome IV, p. 231 (but Comtc half perceived his error in saying that social dynamics treats of the "continucd movement" of society, and that "the popular division into anatomy and physiology tends to disappear cntirely"); Roberty, La Sociologie, see third edition, Chap. VII, eqpecially the footnote on p. 112; Bernès, Sociologie et Morale, 1896, p. 59; Novicow, Annales de l'Institut International de Sociologic, Tome IV, p. 190; Ludwig Stein, Wesen und Auigabe der Sociologie, p. 8 (Abdruck a. d. Archiv f. system. Philosophie, Bd. IV); René Worms, Revue Internationale de Sociologie, sixième année, 1898, p. 539.

    It is true that some have combated this idea. Dr. De Grecf did so in his Introduction à la Sociologie, Première Partic, 1886, p. 89. I have done so in the American Journal of Sociology for September, 1896, Vol. II, p. 244, and in my Outlines of Sociology, 1898, p. 173. More reccntly Dr. Worms has corrected his mistake, and MM. Coste, Dubuisson, d'Araujo, Delbet, and other members of the Society of Sociology of Paris, have exposed the falsity of this idea with considcrable clearness. (See the Revue Intcrnationale de Sociologie, septième année, 1899, pp. 455, 462, 465, 539, 541, 544, 549.)
    ${ }^{2}$ See my article entitled The Natural Storage of Energy, in the Monist for January 1895, Vol. V, pp. 247-263.
    ${ }^{3}$ My efforts to unfold this principle date back to 1880, when on August 31 I read a paper before the anthropological section of the American Association for the Advancement of Science, at its mecting in Boston, entitled, Feeling and Function as Factors in Human Development, abstracts of which appeared in the Boston Advertiser for September 1, and in Science for October 23 (Original Series, Vol. I, No. 17, pp. 210-211). The idea was extensively developed in Dynamic Sociology, Vol. I, Chap. VII (see especially pp. 485 ff , 601 ff ). A chapter (XIII) was devoted to it in the Psychic Factors of Civilication, and it reccived treatment in several of the chapters (V, VII, VIII, X) of the Outlines of Sociology. Ncw light was shed upon it by still later researches, and I returned to it from a somewhat different point of view in an article in the American Journal of Sociology for January, 1898 (Vol. III, pp. 520-536), entitled Utilitarian Economics. A much longer article, written in French, and entitled L'Économie de la Douleur et l'Économie du Plaisir, but dealing with the same thought in a much expanded form, was read before the third congress of the Institut International de Sociologie in Scptember, 1897, and appcared in the Annales of the Institute for that year (Tome IV, Paris, 1898, pp. 89-132).
    ${ }^{4}$ Sce my article cntitilcd The cssential Nature of Religion; International Journal of Ethics, Vol. VIII, Philadelphia, January, 1898, pp. 169-192.

[^66]:    ${ }^{1}$ Mr. Herbert spencer has brought out this truth in a very clear manner. See his Principles of Sociology, Vol. III, p. 181 (sec. 662).

[^67]:    ${ }^{1}$ According to De Morga, who was a member of the high court at Manila and vice-regent there in 1598 , the Chinese were sending twenty ships a year to Manila at the time of the conquest, laden with cotion, silk, porcelain, sulphur, iron, copper, flour, quicksilver, cloth, and gunpowder, in exchange for skins of deer, buffalo, and marten. The Filipinos had small brass and cast-iron cannon in Manila when the place was taken by the Spaniards.

[^68]:    ${ }^{1}$ The Dutch expedition which made a hostile visit to the Philippines in 1600 found that there were very few Spaniards in each district. "They have a priest for each [district], whom the inhabitants hold in great veneration, so much so, that it is only for want of priests if they do not hold all these islands in servitude, for there are even places where there are neither priests nor Spaniards and nevertheless they cause the tribute to be paid therc." That the Spanish "conquest" must have been one of peace rather than violence is further illustrated by letters found by the Dutch while preying upon the traffic in Manila Bay in 1600. These letters showed that complaint had been made to the governor of certain Spaniards who had illtreated the "Indians." The governor had given orders to the priest to take information on these acts and transfer the guilty to Manila at the King's expense. "The monks were the first to effect the conversion and administer the spiritual and temporal and ecclesiastical afiairs of the natives, but after the arrival of the archbishop and bishops the manage-

[^69]:    ${ }^{1}$ Hakluyt Soc. translation, p. 241.
    ${ }^{2}$ De Morga says that in his day "they considered many things and words as the greatest outrage and insult, when said to men and women, and they were less easily forgiven than wounds or violence."

[^70]:    ${ }^{1}$ In this connection the following facts, as illustrating their nervous and emotional tempcrament, are of interest. A curious nervous discase has been noticed among the Filipinos by several observers. When suddenly attacked by this affliction, which may occur, it would seem, at any time or place, the patient uncontrollably imitates the actions of the person he happens to be with, and obeys his suggestions absolutely. Some Filipinos are capable of religious frenzy, like the Moros. The latter, as is well known, sometimes become fanatical, devote themselves to death by an oath (juramentados), and then attack Christians without regard to odds.
    ${ }^{2}$ El Folklore Filipino, Manila, 1889. The author was honorary member of the Society of Commercial Geography of Madrid, of the Royal and Imperial Geographical Society of Vienna, and delegate in Manila of the Société Académique Indo-Chinoise of France.
    ${ }^{3}$ De los Reyes points out the superiority of Filipino women to the men in some respects, and says that they advise and guide their husbands in business affairs. It was theinfluence of the women that made conversion easy in early times. Other writers have made the same observation.
    ${ }^{4}$ De Morga (p. 320) states that the monks taught the natives to "represent dramas and plays in Spanish and in their own language very gracefully." This was before 1600.

[^71]:    ${ }^{1}$ De Morga, speaking of the substantial government buildings erected in Manila after the fire of 1603 says of the Jesuits that "they promote the study of latinity, the arts, and carcs of conscience, and close to them is a college of Spanish students with their rector." (His work was published in Mexico in 1609, before Santo Tomás was founded.) "The order of St. Augustine has many schools in the islands of Pintados [the Visayas] and many monasteries both there and in Luzon. The Dominican order holds the schools of the provinces of Cagayan [in northern Luzon] and others in the province of Pangasinan, besides monasteries and missions.
    "The Franciscan order has some schools and monasterics around Manila and all the province of Camarines and the coast opposite to it and the lagoon of bay, which make a large number of schools.
    "The Company of Jesus has three large schools around Manila, and many missions and several others in the isles of Cebu, Leyte, Ybabao, Samar, and Bohol."
    After speaking of the willingness of the natives to be converted, De Morga adds: "At the same time that the monks have taught the natives matters of religion in their schools, they labor to make them more skillful in things for their advancement by holding schools of reading and writing in Spanish for the boys, teaching them to assist in the church, plain song, and chanting with the organ and playing upon instruments."

    Manila was a showy capital in 1603, "one of the towns most praised by strangers whofock to it of any in the world." It was the seat of an archbishop, and the pomp and decoration of the religious ceremonies added to the attractions of the city. It had a number of charitable institutions, viz, "a conventual house-a royal foundation-with a lady rector and assistants, where women in distress and maidens of the city are taken in under the form of religious retirement:" a hospital under royal patronage for Spaniards with "a doctor, apothccary, surgeons, administrators, and servants, with its church, sick rooms, and set of beds" (the superintendents were three Franciscan monks); another hospital founded by the Brotherhood of Merey, of Lisbon, for the benefit of the poor, including slaves and poor women; and still another hospital for natives, founded by a Franciscan lay friar, Fray Juan Clemente.
    ${ }^{2}$ Report of the Philippine Commission to the President, vol. 1, p. 120.
    In an article upon the "Philippine problem" in the New York Independent of May 2, 1901, Señor Antonio Regidor Jurado, LL. D., remarks that the United States "should remember that the Filipinos are capable of discussing the science of government. * * * General Azcarraga, Señor Sagasta's predecessor as premier of Spain, is a Filipino, as are Señor Govantes, undersecrctary of the Spanish home department; Señor Abella, one of the most prominent members of the Spanish Cortes; Scinor Ajuiler, private secretary of the Spanish Queen Regent; Judge Laserne; Señor Manuel Azcarraga, undersecretary of the colonial department of Spain, and Generol Orozco, captain-general of Saragossa."

[^72]:    ${ }^{1}$ See appendix for specimens of the alphabets.
    2 The bibliography of works published in Manila begins with a Doctrina Cristiana tagalo-española, con texto castellano y latino, impresa en la imprenta de los dominicos de Manila, 1593, and a Doctrina Cristiana en lengua China, impresa en Manila, 1593. A Tagalog grammar was published in 1610 and a Tagalog dictionary in 1612. The list of works down to 1810 contains a number of grammars and dictionarics, accounts of martyrdoms, histories of the various provinces, funcral orations, and other religious works, but no distinctively Filipino writings. (See La Imprenta en Manila desde sus origenes hasta 1810. J. F. Mcảina, Santiago de Chile, 1896.)

[^73]:    ${ }^{1}$ A similar ballad of the Bicol tribe is given in Retana's Archivo, and M. Montano states that on one of his geological excursions his Bicol guide left him to carry a copy of a poem-the Bicol Iliad, M. Montano called it-to his inamorata who lived near by.

[^74]:    ${ }^{1}$ The account of their execution is given by Montero y Vidal, Historia general de Filipinas, Tom. III.
    ${ }^{2}$ See the life of Zobel in the Deutsche Rundschau for 1897, and testimony before the Philippine Commission, Report, Vol. II, passim, for examples.

[^75]:    ${ }^{1}$ The name Abella is that of an author of geological and statistical works upon the Philippines. Professor Blumentritt says that both father and son were shot.
    ${ }^{2}$ This date of founding of the university is taken from the article by Moret, the Spanish minister of public instruction in 1870, in the "Diccionario de legislación de instrucción pública," Tom. II, p. 181. Other dates are sometimes given.

[^76]:    ${ }^{1}$ Yet in the account of education prepared for a Philippine exhibition at Madrid, in 1887, as part of the matcrial of education at the university are mentioned a museum of natural history of 5,474 specimens, mostly zoological and mineralogical, with a special library, and provided with the necessary apparatus; a physical cabinet, containing what was then new physical apparatus, such as the Gramme dynamo-electrical machine, with a Serrin regulator, a Carré machine, a phonograph worked by a small Gramme machine, a telephone, electro-magnets, besides maps and drawings sufficient for use in lectures. A new chemical laboratory, a dissecting room, and a botanical garden are also described, which would indicate that practical scientific work must be carried on, or, at any rate, that opportunity was offered for such work. The explanation of the absence of scientific studies given in the above-quoted work is that there was no special call for them in the islands.

[^77]:    ${ }^{1}$ Exposición general de las islas Filipinas en Madrid, 1887. Comisión central de Manila. Memoria correspondiente á la sección $8^{a}$, Grupos 72 y 73. Edición oficial. Manila, Tipografia del Colegio de Sto. Tomás, 1887.

[^78]:    The system in operation at the time of American occupation, January 1, 1899 was based on the law of 1865 as modified by that of 1880 , and had in view a progressive course of public and private instruction through primary and secondary schools to the special schools and university and it may be

[^79]:    ${ }^{1}$ Boards of education may, in their discretion, permit boys and girls of school age to attend the same school; and it is hoped that, at least with young children, this plan will prevail; as it will tend to develop that high respect between the sexes which is the basis of true womanhood and manhood. In small towns and in the country it may often be the only means of establishing sufficient schools.

[^80]:    1 This chapter has been furnished by a member of the international jury on primary education.
    2 The Exposition comprised, as it were, two great parallelograms extending across the Scine at some distance from each other and connected by the intermediate portion of the seine, whose borders were crowded also with Exposition buildings. The larger of the two main divisions, the Champ de Mars section, starting at the Trocadéro, crossed the Seine at the bridge d'Jéna and extended southeast as far as the Avenue de la Motte Picquet, facing the famous Ecole Militaire. The second division spread out at one end into a wedge-shaped seetion between the Avenue des Champs Elysées and the Seine, which was occupied by the two palaces of fine arts. This portion was connected by the bridge Alexander III with the "Esplanade" extending to the noble façade of the Hôtel des Invalides.

[^81]:    ${ }^{1}$ This and the following numbers in the text refer to the diagram on p. 1662.

[^82]:    ${ }^{1}$ Report upon the organization and status of primary education in 1900 (Rapport sur l'organisation et la situation de l'enseignement primaire public en 1900, présenté par l'inspection générale). Two volumes treating of the service of inspection, viz, Inspection académique and Inspection primaire.

[^83]:    ${ }^{1}$ See "Educational lessons of the school exhibits at Paris," Educational Review, February, 1901.

[^84]:    ${ }^{1}$ The honorary president of the superior jury was the minister of commerce; the honorary vicepresidents, the minister of public instruction, the minister of agriculture, and the CommissionerGeneral of the Exposition. The following were entitled to membership: The presidents and vicepresidents of group juries, and the commissioners from countries represented by more than 500 exhibitors; the Director-General and the members of the superior committee of revision.

[^85]:    ${ }^{1}$ Members of the jury.-Bourgeois (Léon), president, France; Brereton (S. H. Cloudesley), vicepresident, Great Britain; Leblanc (René), reporter, France; Baudrillard (Just), secretary, France; Bayet (Charles), France; Bédorez (Léon), France; Buisson (Ferdinand), France; Charlot (Marcel), France; Chegaray (Mme. Berthe), France; Deum (Achille), France; Fontaine de Resbecq (Count Eugène de), France; Jost (Guillaume), France; May (Louis-Henry), France; Comte (Félix), France; Fougère (Lovis), France; Léger (Louis), Bulgaria; Tolman Smith (Miss Anna), United States; Alfstad (J.N.A.), Norway; Izwolski (Pierre), Russia; Collière (M.), Republic of South Africa; Ujváry (Béla), Hungary; Thomesco (Dr. T.), Roumania; Kovalevsky (E.P.), Russia.

[^86]:    ${ }^{1}$ From The Outlook, November 24, 1900.

[^87]:    ${ }^{1}$ Reprinted from Education.
    2 Colleges were classed in the American exhibit under superior instruction. M. Compayré evidently had in mind the French "collèges" and the French system of classification.-A.T.S.

[^88]:    ${ }^{1}$ Here is an cxample, the work of a boy of 12, in the eighth year. The question is: Compare the curved surface of a hemisphere with the lateral surface of a cylinder whose diameter and altitude equal the diameter of the hemisphere. The solution is given in the following terms without calculation: $\frac{1}{3}$ is the ratio of the entire surface of a hemisphere $a$ inches in diameter to the entire surface of a cylinder $\alpha$ inches in diameter and altitudc. $\frac{1}{2}$ is the ratio of the curved suriace of a hemisphere to the lateral surface of a cylinder.
    2 We take a few examples from the books of a Brooklyn school, by a pupil of the eighth year.

[^89]:    ${ }^{1}$ From the Journal of Education (London), A pril, 1901.
    ${ }^{2}$ As a somewhat different opinion has been expressed in the Journal of Education with regard to the respective merits of the British and American display from schools of art, it is perhaps necessary for me to remark that my opinion is an unbiased one-in so far as my committee had nothing whatever to do with the organization of this part of our section-and is supported by the award of the international jury.

[^90]:    ${ }^{1}$ From the Manchester Guardian, February 18, 1901.
    ${ }_{2}$ Miss Sara A. Burstall, head mistress of the Manchester High School of Girls. One of the five women appointed by the Gilchrist trustees to visit the United States in 1893 to report on the education of girls in this country.-A.T.S.

[^91]:    ${ }^{1}$ Collège de France, Museum of Natural History, Practical School of High Studies (École Pratique des Hautes Études), Superior Normal School, School of Charts (École Nationale des Chartes), School of Oriental Languages, French School of Archæology at Rome, French School at Athens. The remaining special schools, such as the Conservatoire des Arts et Métiers, École Nationale Supérieure des Mines, etc., are under the charge of other ministers.

[^92]:    ${ }^{1}$ From report to Chamber of Deputies, by M. Maurice-Faure, chairman of the financial committee (1900), p. 315.
    ${ }^{2} 214,015,253 \mathrm{frs}$.-public schools oniy; includes State expenditure for normal schools ( $8,511,468 \mathrm{frs}$.), from report of the minister, 1896-97, p. cxev.
    ${ }^{3}$ Included in total for primary schools.
    ${ }^{4}$ Report of M. Maurice-Faure, p. 253.
    ${ }^{5}$ Includes 3 , 909 in secondary courses, Mauricc-Faure, pp. 24t-246.
    ${ }^{6}$ Maurice-Faure, p. 205.
    ${ }^{7} 1898$.
    ${ }^{8}$ Maurice-Faure, p. 35.

[^93]:    1 These statistics are carefully compiled by the permanent statistical commission of primary education. President, M. E. Levasseur.

[^94]:    ${ }^{1}$ Statistique de l'enseignement, 1888.
    ${ }^{2}$ Enquêtes et Documents relatifs à l'enseignement supérieur, tome Lxxi, pp. 311-338.
    ${ }^{3}$ Report of M. Maurice-Faure, 1899, p. 172.
    ${ }^{4}$ Superior schools. (Universities not yet organized.)

[^95]:    ${ }^{1}$ Topics for the congress of primary education (date of congress, August 2-6): (1) Instruction in domestic cconomy and industry (education ménagère); definition, limits, and adaptation to the different grades. (2) Echool attendance (fréquentation scolaire). (3) Moral education; objects, principles, methods, and processes. (4) Superior primary education; object, limits, means of adapting to regional and local interests (county and district). (5) Continuance of education after the school period (institutions post-scolaires); adult courses, popular lectures, cte.

[^96]:    ${ }^{1}$ The two Diomede Islands (Ratmanoff and Krusenstern) form three separate channels that are used by ships between Cape Prince of Wales, Alaska, and East Cape, Siberia; hence the word "straits" is the correct term.

[^97]:    ${ }^{1} \mathrm{AN}$ ACT to define and punish crimes in the district of Alaska and to provide a code of criminal procedure for said district. (Approved March 3, 1899.)

[^98]:    ＊Statistics of 1898－99．
    $a$ High school was in session 130 days．

[^99]:    * Statistics of 1898-99.

[^100]:    * Statistics of 1898-99.

[^101]:    * Statistics of 1898-98

[^102]:    * Statistics of 1898-99.

[^103]:    * Statistics of 1898-99.

[^104]:    *Statistics of 1898-99.

[^105]:    * Statistics of 1898-99.

[^106]:    ${ }^{1}$ Students who take economic geography the first semester will take American history the second, and vice versa.

[^107]:    * Statistics of 1898-99.

[^108]:    ＊Statistics of 1898－99．
    $a$ In school of agriculture．

[^109]:    ＊Statistics of 1898－99．

[^110]:    * Statistics of 1898-99.

[^111]:    * Statistics of 1898-99.

[^112]:    * Statistics of 1898-99.
    a Free to residents; $\$ 3 \% .50$ to nonresidents.

[^113]:    ${ }^{1}$ Dental Cosmos, May, 1901, p. $5 \% 0$.
    ${ }^{3} 181$ women inciuded.
    ${ }^{4} 1.51$ women included.
    ${ }^{\circ}$ Pertaining to the hospitals with which the nurso schools are connected.

[^114]:    * 1n 1898-99.
    $b$ In common with the university or college.

[^115]:    e Kent College of Law was consolidated with the Chicago College of Law in 1000, under name of Chicago-Kent College of Law of Lake Forest University. $f$ A day school and an evening school.

[^116]:    * Statistics of 1898-99.

[^117]:    $b$ In common with the university．
    $c$ Under certain conditions．

[^118]:    $b$ In common with the university.

[^119]:    * Statistics of $1 \triangleright 98-99$.

[^120]:    *Statistics of 1898-99.

[^121]:    *Statistics of 1898-99.
    +Statistics of 189\%-98.

[^122]:    $a$ Per cent of total number of graduates.

[^123]:    

[^124]:    

[^125]:    A．M．Hendon．．．．．．．．
    Prof．A．F．Kyger．
    Thomas E．Sanders． L．J．Alleman ．．．．．．． Mrs．S．E．Munday
    

[^126]:    

[^127]:    

[^128]:    

[^129]:    
    

[^130]:    * Statistics of 1898-99.

[^131]:    * Statisties of 1808-99.

[^132]:    * Statistics of 1898-99.

[^133]:    * Statistics of 1898-99.

[^134]:    * Statistics of 1898-99.

[^135]:    *Statistics of 1898-99.

[^136]:    * Statistics of 189S-99.

[^137]:    * Statistics of 1808-99.

[^138]:    * Statistics of 1898-99.

[^139]:    * Statistics of 1898-99.

[^140]:    \% Statistics of 1898-99.

[^141]:    * Statistics of 1898-99.

[^142]:    ＊Statistics of 1898－99

[^143]:    * Statistics of 1898-39.

[^144]:    ${ }^{1} 51$ N. H. Rep. (1900), pp. $276-281 . \quad{ }^{2} 62$ Mass. Rep. (1897-98), pp. 454 , $455 . \quad{ }^{3}$ R. I. Rep. (1899), p. 86.

[^145]:    ${ }^{1}$ From the American Journal of Education, May, 1901.

[^146]:    a Report School Commissioner, 1900, p. 5\%. Figures are for term of service in city of Boston.
    $b$ Number whose records are known.
    $c$ Report Board of Education, 1899, p. 113.
    $d$ Report Board of Education, 1895, p. 93.
    $e$ Report Board of Public Instruction, 1899, p. 110 et seq. Figures are for term of service in city of Albany.
    $\dot{f}$ Repor't of Board of Directors Public Schools, 1876, p. 27 .
    ${ }_{g}$ Report of Board of Education, 1900, p. 35 et seq.
    $h$ Report of Public Schools, 1900, p. 29 et seq.

[^147]:    ${ }^{1}$ This soction was added in the House. The State superintendent says that it would not have passed without it.

[^148]:    a No school board. Schools controlled directly by city cauncil.
    $b$ No information.
    $c$ Each of the 14 wards of the city has in the "board of controllers" ? for city at large 6 represenatives, which constitate a board for that ward.

[^149]:    «Does not inciudo gifts to secondary schools.
    $b$ Includes gifts to normal and secondary schools.
    $c$ Leland Stanfold Junior University alone received $\$ 11,000,000$ in 1898-93.

[^150]:    ${ }^{1}$ Report of the United States Commissioner of Education for 1897-98; Report of the United States Industrial Commission on Labor Legislation, 1900; Labor Lavs of the United States, and Bulleting of tho Department of Labor.

[^151]:    a Includes high and middle schools; also 20,536 in private elementary

[^152]:    a Eee note tor cur benditares by the higher council "for educational purposes."
    $c$ Encludes $\$ 454,630$ for sites and buildings.

